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	SEARCH REQUEST FORM (17-85
	Requestor's 0. Serial
٠.	Name: Leboah Byes Number: Number:
	Date: 10/110/99 Phone: 308-2110 Art Unit: 3 7 63
	Search Topic: Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).
	A method for the treatment of an occulusion
:	A method for the treatment of an occulusion in a blood vessel, see attached Claims
	e e e e e e e e e e e e e e e e e e e
	ρή 06-21-99P07:15 RCVD
_	
-	STAFF USE ONLY
	Bibliographic Other

PTO-1590 (9-90)

*** Your Memo ***

Prepared for: Examiner Blyveis

By : Ginger Roberts

Date : March 2, 1999

Attached please for the results of your search for 09/049857. The search was conducted on Dialog in the medical engineering, devices and general medicine databases. Also searched were files 351, 344, 347 which cover worldwide patent information.

Please let me know if you need any further information regarding the search or if you would like to enhance the search strategy in any way.

Thank you for using the Electronic Information Center.

Sincerely,

Ginger D. Roberts
Technical Information Specialist
308-7795

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(c) 1999 DIOGENES file 187:F-D-C Reports 1987-1999/Jun W2 (c) 1999 F-D-C Reports Inc. File 188: Health Devices Sourcebook (1999) ECRI (A nonprofit agency) File 198: Health Devices Alerts(R) 1977-1999/Jun W2 (c) 1999 ECRI-nonprft agncy File 441:ESPICOM Pharm&Med DEVICE NEWS 1999/May W2 (c) 1999 ESPICOM Bus.Intell. Set Items Description S1 OCCLUS? OR BLOCKAGE? ? OR CLOSURE? ? OR OCCLUDED OR CLOSED 2690576 OR BLOCKED OR CLOT? OR AIR()BUBBLE? ? OR EMBOLISM? ? OR THROM-BO()EMBOLISM? ? OR THROMBOEMBOLISM? ? OR THROMBOSIS OR THROMB-US OR OBSTRUCT? S2 BLOOD(2N) VESSEL? ? OR ARTERY OR ARTERIES OR CAPILLAR? OR V-EIN OR AORTA OR VENA() CAVA OR ARTERIA OR VENA OR ARTHEROSCLER-OSIS OR VASCULAR S3 PRESSURE? ? OR PRESSURI?ED OR PSI OR POUNDS()PER()SOUARE()-INCH S4 1749156 CATHETER? ? OR TUBE? ? OR CANNULA? ? OR PIPE? ? OR SIPHON? OR SYPHON? OR VENTURI OR WIRE? ? S1(2N) (REMOV? OR ASPIRAT? OR TAKE?() AWAY OR EXCIS? OR SUCK-S5 ()OUT OR EXTRACT? OR ERADICAT? OR CUT()OUT) S6 2929 S2(S)S5 S7 348 S3(S)S6 S8 127 S4(S)S7 S9 71 RD (unique items) S10 367 S2 (9N) S4 (9N) S5 S11 16 S10(9N)DISTAL S12 17 S10 (9N) FLOW S13 30 S11:S12 S14 19 RD (unique items) S9 OR S14 S15 88 ?t15/3, k/all>>>KWIC option is not available in file(s): 77 (Item 1 from file: 5) 15/3, K/1DIALOG(R)File 5:Biosis Previews(R) (c) 1999 BIOSIS. All rts. reserv.

BIOSIS NO.: 199799810596

A new treatment for severe pulmonary embolism: Percutaneous rheolytic thrombectomy.

AUTHOR: Koning Rene(a); Cribier Alain; Gerber Lowell; Eltchaninoff Helene; Tron Christophe; Gupta Vivek; Soyer Robert; Letac Brice AUTHOR ADDRESS: (a) Serv. Cardiologie, Hopital Charles Nicolle, 1 Rue de Germont, 76000 Rouen, France

JOURNAL: Circulation 96 (8):p2498-2500 1997

ISSN: 0009-7322

RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: Background. The rheolytic thrombectomy catheter has been specially designed to remove intravascular thrombus from coronary and peripheral arteries . It demonstrates a practical application of Bernoulli's principle relating to a low-pressure zone in the region of a high-velocity jet. In this device, this effect is created by direct high-pressure saline jets located at the tip. Thrombus is drawn into this region and, because of the large pressure difference, undergoes mechanical thrombolysis due to the powerful mixing forces. The resulting microparticles are aspirated through the same catheter and removed from the body. Methods and Results. We report the use of this device...

... same good angiographic result and a decrease to a normal level of the systolic pulmonary pressure . Conclusions. This preliminary results

suggest that this easy technical method may be useful in the...

15/3,K/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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10509229 BIOSIS NO.: 199699130374

Salvage of ischemic myocardium with simplified and even delayed coronary sinus retroperfusion.

AUTHOR: Aldea Gabriel S(a); Zhang Xi; Rivers Samuel; Shemin Richard S AUTHOR ADDRESS: (a) Dep. Cardiothoracic Surg., Boston Univ. Med. Cent., 88 E. Newton St., Boston, MA 02118-2393, USA

JOURNAL: Annals of Thoracic Surgery 62 (1):p9-15 1996

ISSN: 0003-4975

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: Background: Despite the proven efficacy of **pressure** -controlled intermittent coronary sinus obstruction (PICSO) and synchronized retrograde perfusion (SRP) in salvaging ischemic myocardium...

- ...To address these concerns a simplified retroperfusion technique (SR) was developed that continuously infuses superior **vena** caval blood at 7 mL/min into the CS **catheter** without balloon occlusion. Methods: Thirty pigs underwent 90 minutes of ischemia imposed by snaring the two largest diagonal branches of the left anterior descending **artery** and were randomized to one of five treatment groups: One group received no retroperfusion (control...
- ...initial 60 minutes of ischemia was followed by 30 minutes of delayed SR with superior **vena** caval blood. All animals were then placed on cardiopulmonary bypass and, after a 60-minute cardioplegic arrest, the coronary **artery obstructions** were **removed**, to simulate surgical revascularization. This was followed by 3 hours of reperfusion. The area of...
- ...for delayed SR (p lt 0.01 for each group versus control). The mean CS pressure (in mm Hg) during treatment was 6.3 +- 1.7 for the control group, 25...
- ...is considerably simpler. The simplified retroperfusion technique is inherently safer because of the lower CS **pressures** imposed by low flows and the lack of CS balloon obstruction. The efficacy of delayed...

15/3,K/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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09444784 BIOSIS NO.: 199497453154

Prevention of delayed ischaemic deficits after aneurysmal subarachnoid haemorrhage by intrathecal bolus injection of tissue plasminogen activator (rTPA).

AUTHOR: Seifert V(a); Stolke D; Zimmermann M; Feldges A AUTHOR ADDRESS: (a)Neurochirurgische Klinik, Univ.-GHS-Essen, Hufelandstrasse 55, D-45122 Essen, Germany

JOURNAL: Acta Neurochirurgica 128 (1-4):p137-143 1994

ISSN: 0001-6268

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

- ..ABSTRACT: aneurysm as the bleeding source was established by pan-angiography, which also excluded additional cerebro-vascular malformations. The control group consisted of 68 patients, which were also treated within 72 h...
- ...bleeding, 5-1 0 mg of rTPA were injected into the ventricles via an intraventricular **catheter** at the end of the operation. Apart from the intrathecal application of the thrombolytic substance...
- ...the occurrence of cerebral vasospasm, was the only defined endpoint of the study. Radical blood **clot removal**, verfied by serial CT scans was achieved in all patients treated using the intrathecal thrombolytic...
- ...responded well to moderate hypertensive-hypervolaemic treatment resulting in an increase of their systolic arterial **pressure** up to 160 mm Hg. In none of these three patients cerebral infarction and/or permanent neurological deficits developed. In one patient with spasmogenic infarction of the middle cerebral **artery** territory in complete hemiparesis persisted. The overall results in the control group were as follows...
- ...a significant reduction of symptomatic vasospasm and DID. With regard to the radicality of blood **clot removal** achievable by the use of rTPA it is furthermore concluded, that conversion of a SAH...

15/3,K/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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08755373 BIOSIS NO.: 199395044724

Clinical trials of an intravenous oxygenator in patients with adult respiratory distress syndrome.

AUTHOR: High Kane M(a); Snider Michael T; Richard Russell; Russell Garry B; Stene John K; Campbell David B; Aufiero Thomas X; Thieme Gary A AUTHOR ADDRESS: (a) Dep. Anesthesia, Milton S. Hershey Med. Cent., P.O. Box 850, Hershey, Pennsylvania 17033, USA

JOURNAL: Anesthesiology (Hagerstown) 77 (5):p856-863 1992

ISSN: 0003-3022

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

- ...ABSTRACT: five patients who were suffering from severe adult respiratory distress syndrome as a result of **aspiration**, fat **embolism** or pneumonia. IVOX was used in an attempt to provide supplemental transfer of CO-2...
- ...lungs were ventilated with an FI-O-2 = 1.0 and a positive end expiratory pressure of gtoreq 5 cmH-2O. The right common femoral vein was located surgically, and the patient was systemically anticoagulated with heparin. A hollow introducer tube was inserted into the right common femoral vein, and the furled IVOX was passed into the inferior vena cava and advanced until the tip was in the lower portion of the superior vena cava. IVOX use ranged from 2h to 4 days In this group of patients, IVOX gas...
- ...IVOX transferred up to 28% of metabolic gas-exchange requirements. One patient with a small **vena cava** showed signs of caval obstruction. Three other patients demonstrated signs of a septic syndrome after...

15/3,K/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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.07993634 BIOSIS NO.: 000093049307

RHEOLYTIC CATHETER FOR PERCUTANEOUS REMOVAL OF THROMBUS

AUTHOR: DRASLER W J; JENSON M L; WILSON G J; THIELEN J M; PROTONOTARIOS E I

; DUTCHER R G; POSSIS Z C

AUTHOR ADDRESS: POSSIS MED., 8325 10TH AVE. N., MINNEAPOLIS, MINN. 55427.

JOURNAL: RADIOLOGY 182 (1). 1992. 263-267.

FULL JOURNAL NAME: Radiology

CODEN: RADLA

RECORD TYPE: Abstract LANGUAGE: ENGLISH

ABSTRACT: The authors present a percutaneous thrombectomy system (rheolytic thrombectomy catheter [RTC]) in which high-velocity jets of saline solution are used to lyse and remove thrombus. The catheters (4-6 F) direct a 10,000-15,000-psi (0.7-1.05 .times. 105-kPa) jet of saline solution onto an exhaust port from orifices at the end of the catheter. The jet entrains clot and resulting fragments and brings them into the high-velocity region for lysis and removal. Whole blood clots (10-15 cm) placed in 6-9-mm-diameter tubing were completely dissolved and removed...

- ...less than 1 minute. In vivo use in a canine model resulted in lysis and removal of clots from a femoral artery, without vessel damage. The small caliber, flexibility, and effective lysis of this system suggest its...
- ...that are difficult to access surgically and in small-diameter vessels that require more rapid **removal** of **thrombus** than can be achieved with thrombolytic therapy.

15/3,K/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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07268099 BIOSIS NO.: 000090047976

TRANSLUMINAL ATHERECTOMY FOR OCCLUSIVE PERIPHERAL VASCULAR DISEASE

AUTHOR: GRAOR R A; WHITLOW P L

AUTHOR ADDRESS: DEP. VASCULAR MED., THE CLEVELAND CLIN. FOUND., 9500 EUCLID AVE., CLEVELAND, OH 44195.

JOURNAL: J AM COLL CARDIOL 15 (7). 1990. 1551-1558.

FULL JOURNAL NAME: Journal of the American College of Cardiology

CODEN: JACCD

RECORD TYPE: Abstract LANGUAGE: ENGLISH

- ...ABSTRACT: angioplasty to provide a durable result has led to the development of other methods of **catheter** -associated interventional therapy. In this study, 112 patients with superficial femoral **artery** stenosis or occlusion were treated with percutaneous atherectomy. Patients were considered to have a simple...
- ...occluded segment was > 5 cm. All atherectomies were performed in the superficial femoral and popliteal **arteries**; urokinase thrombolysis was used in conjunction with atherectomy in 16 patients. Atherectomy was considered successful...
- ...the complex group. With the exception of the myocardial infarction, all complications were associated with **catheter** entry site hematomas. Femoropopliteal atherectomy has a high rate of success and low morbidity and...
- ...complex lesions and is a viable and competitive alternative therapy for patients with severe peripheral **vascular** disease. Noninvasive follow-up

with segmental **pressure** measurements and duplex ultrasound scanning is important to detect restenosis. The adjunctive use of urokinase to simplify the segment of atherectomy and **remove** offending **thrombus** appears to be useful and safe.

15/3,K/7 (Item 7 from file: 5)
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06922680 BIOSIS NO.: 000089056072

A CASE OF ACUTE MASSIVE PULMONARY EMBOLISM SUCCESSFULLY TREATED WITH TRANSVENOUS PULMONARY EMBOLECTOMY BY CATHETER

AUTHOR: NAKASAKI Y; TSUJIYAMA S; HIGO M; YAMAMOTO M; YAMASHINA H; FUJII T;

MITOMA Y

AUTHOR ADDRESS: 1ST DEP. INTERN. MED., HIROSHIMA PREFECTURAL HOSP., JPN.

JOURNAL: RESPIR CIRC 37 (12). 1989. 1363-1366. FULL JOURNAL NAME: Respiration and Circulation

CODEN: KOJUA

RECORD TYPE: Abstract LANGUAGE: JAPANESE

- ...ABSTRACT: woman, suffering from acute massive pulmonary embolism, was successfully treate with transvenous pulmonary embolectomy by **catheter**. This patient had been suffering from oppressive chest sensations during exercise, and diagnosed and treated...
- ...walked to the toilet, she complained of chest discomfort and fell into shock (systolic blood **pressure** was 60 mmHg). An ECG examination showed a right bundle branch block and a interverted...
- ...were administered intravenously, and pulmonary angiography was performed immediately. It revealed that the bilateral pulmonary arteries were almost completely obstructed. Although 720,000 units of urokinase were infused into the pulmonary artery, the obstruction did not improve. At the time, we performed a transvenous pulmonary embolectomy. We used a Judkins R 4 guiding catheter for PTCA made by USCI. The catheter was inserted into the pumonary artery and clots were aspirated with a syringe. When the catheter clogged it was withdrawn and flushed. This procedure was repeated until the pulmonary embolism was relieved. The patient's blood pressure rose to 124/70 mmHg, and right ventricular pressure which was 49 mmHg before the embolectomy, dropped to 36 mmHg. A pulmonary scintigraphy 3...
- ...bood flow. The patient was discharged 2 weeks after the embolectomy. Transvenous pulmonary embolectomy by **catheter** was first reported in 1971 by LJ Greenfield. But after his initial report, few other...

15/3,K/8 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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06102237 BIOSIS NO.: 000085065386

TREATMENT OF AIR EMBOLISM WITH A SPECIAL PULMONARY ARTERY CATHETER INTRODUCER SHEATH IN SITTING DOGS

AUTHOR: BOWDLE T A; ARTRU A A

AUTHOR ADDRESS: DEP. ANESTHESIOL., TN-10, UNIV. WASHINGTON, SEATTLE, WASH. 98195.

JOURNAL: ANESTHESIOLOGY 68 (1). 1988. 107-110.

FULL JOURNAL NAME: Anesthesiology

CODEN: ANESA

RECORD TYPE: Abstract LANGUAGE: ENGLISH

- ABSTRACT: The treatment of venous air embolism by aspiration from central venous catheters is well established. However, some anesthesiologists prefer to use a pulmonary artery catheter to monitor patients undergoing a neurosurgical procedure in the sitting position. While offering certain advantages, pulmonary artery catheters may be of limited use in the treatment of venous air embolism because the small...
- ...port is poorly suited for efficient air aspiration. The authors have designed a special pulmonary artery catheter introducer sheath which can be positioned by intravascular electrocardiography to provide an efficient and effective means of air aspiration, while permitting the simultaneous use of a pulmonary artery catheter for pressure monitoring. The flow characteristics of this sheath, with and without side holes were tested in...
- ...to aspirate 50 ml of blood. The introducer sheath was compared to a Sorenson CVP catheter, a Bunegin-Albin Air Aspiration CVP Catheter, and the proximal port of a pulmonary artery catheter. The rank order of flow rate was: Bunegin-Albin CVP > introducer sheath without side holes = introducer sheath with side holes > Sorenson CVP > pulmonary artery catheter (P = 0.0001). The introducer sheath was then compared to a pulmonary artery catheter for the treatment of a 4 ml/kg venous air embolism in sitting, anesthetized dogs...
- ...greater than that retrieved by simultaneous aspiration of atrial and distal ports of the pulmonary **artery** catheter , 16% (P = 0.01). The efficiency of air aspiration was related to survival, with 68...

15/3,K/9 (Item 9 from file: 5)
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05249177 BIOSIS NO.: 000082089801

A CASE OF DEEP VEIN THROMBOSIS AFTER CORONARY BYPASS SURGERY

AUTHOR: SUMA H; SASAKI S; MAEDA M; SHIGUMA S; OZEKI M; TAKEUCHI A AUTHOR ADDRESS: DEP. OF THORACIC AND CARDIOVASCULAR SURGERY, OSAKA MED. COLL., OSAKA, JAPAN.

JOURNAL: J JPN ASSOC THORAC SURG 34 (4). 1986. 532-535.

FULL JOURNAL NAME: Journal of the Japanese Association for Thoracic Surgery

CODEN: NKZAA

RECORD TYPE: Abstract LANGUAGE: JAPANESE

ABSTRACT: Deep vein thrombosis after coronary bypass surgery was successfully treated by emergency thrombectomy. Sudden onset of pain and swelling was noted in left lower limb at seventh post-operative day. The saphenous vein of this left leg had been taken down at the time of coronary bypass surgery, and a central venous pressure line cannula had been inserted from the cut end of the saphenous vein into the femoral vein on that time. Intimal injury of the femoral or iliac vein by insertion of cannula, or excessive compression of the femoral vein after removal of the cannula were suspected as the cause of thrombus formation. Thrombectomy was made with Fogarty's balloon catheter inserted from the left femoral vein and temporary occlusion of inferior vena cava through laparotomy was made to prevent pulmonary artery embolism. Massive thrombus was extracted and symptoms disappeared dramatically. No recurrence of thrombosis has been found three months after surgery. Although deep vein thrombosis after coronary bypass surgery is a rare complication, care should be taken to prevent...

15/3,K/10 (Item 10 from file: 5)
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05053212 BIOSIS NO.: 000081011336

NEW IMPLANTED CHRONIC CATHETER DEVICE FOR DETERMINING BLOOD PRESSURE AND CARDIAC OUTPUT IN CONSCIOUS DOG

AUTHOR: GARNER D; LAKS M M

AUTHOR ADDRESS: DIVISION CARDIOLOGY, DEPARTMENT MEDICINE, HARBOR-UNIVERSITY CALIFORNIA LOS ANGELES MEDICAL CENTER, TORRANCE, CALIF. 90509.

JOURNAL: AM J PHYSIOL 249 (3 PART 2). 1985. H681-H684.

FULL JOURNAL NAME: American Journal of Physiology

CODEN: AJPHA

RECORD TYPE: Abstract LANGUAGE: ENGLISH

... ABSTRACT: blood pressure monitoring, monitoring of cardiac outputs, and blood sampling in conscious dogs. Infection, vascular thrombosis , and catheter extraction have not occurred. This modified VAP has been used for 6 mo. and in 25 dogs to date without any failure to determine arterial blood pressure and cardiac output.

15/3,K/11 (Item 11 from file: 5) DIALOG(R)File 5:Biosis Previews(R)

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04707210 BIOSIS NO.: 000080010336

A CHRONICALLY IMPLANTABLE ARTERIAL CATHETER FOR USE IN UNRESTRAINED SMALL ANIMALS

AUTHOR: WILLIAMS W M

AUTHOR ADDRESS: DEP. OF NEUROLOGY, BOX 673, UNIVERSITY OF ROCHESTER MEDICAL CENTER, 601 ELMWOOD AVE., ROCHESTER, NY 14642, USA.

JOURNAL: J NEUROSCI METHODS 12 (3). 1985. 195-204. FULL JOURNAL NAME: Journal of Neuroscience Methods

CODEN: JNMED

RECORD TYPE: Abstract LANGUAGE: ENGLISH

... ABSTRACT: rat). It can be implanted chronically, at least several days before use, into the femoral artery, without interference of movement or damage by the animal. The catheter assembly is worn subdermally until the distal portion is exteriorized for blood sampling. The proximal tip of the catheter is occluded with a removable plug before implantation, thereby eliminating the necessity of daily flushing prior to use. The catheter was used extensively in studies of the blood-brain barrier involving the bolus injection of [14C] sucrose into the jugular vein of conscious, unrestrained rats. Tracer concentration in plasma and whole blood was subsequently determined from...

15/3,K/12 (Item 12 from file: 5)
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BIOSIS NO.: 000080006407 04703281

INTRAOPERATIVE FIBRINOLYTIC THERAPY AN ADJUNCT TO CATHETER THROMBOEMBOLECTOMY

AUTHOR: QUINONES-BALDRICH W J; ZIERLER R E; HIATT J C AUTHOR ADDRESS: VASCULAR SURGERY SECTION, DEP. SURGERY, 72-160 CHS, UCLA MED. CENTER., LOS ANGELES, CA 90024.

JOURNAL: J VASC SURG 2 (2). 1985. 319-326. FULL JOURNAL NAME: Journal of Vascular Surgery

CODEN: JVSUE

RECORD TYPE: Abstract

LANGUAGE: ENGLISH

...ABSTRACT: patients with various complications of atherosclerosis manifested by limb-threatening ischemia. Treatment was by balloon-catheter thromboembolectomy followed by intra-arterial streptokinase infusion. In each patient viability of the involved extremity was questionable after removal of all thrombus accessible to the balloon catheter. Fibrinolytic therapy was used when operative arteriography showed residual thrombus distal to the popliteal artery. All patients were systemically heparinized during the operation and 3 patients were maintained on anticoagulants...

15/3,K/13 (Item 13 from file: 5)
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04588103 BIOSIS NO.: 000079001140
PERITONEOVENOUS SHUNT OCCLUSION ETIOLOGY DIAGNOSIS THERAPY

AUTHOR: LEVEEN H H; VUJIC I; D'OVIDIO N G; HUTTO R B

AUTHOR ADDRESS: DEP. SURGERY, MED. UNIV. S.C., 171 ASHLEY AVE., CHARLESTON, S.C. 29425.

JOURNAL: ANN SURG 200 (2). 1984. 212-223. FULL JOURNAL NAME: Annals of Surgery

CODEN: ANSUA

RECORD TYPE: Abstract LANGUAGE: ENGLISH

ABSTRACT: Electronic **pressure** testing of every LeVeen valve has practically eliminated mechanical malfunction as a cause of shunt...

...shunt. In immediate failure, the ascites may fail to disappear after surgery or reaccumulate if **removed**. Caval **clotting** should be first excluded by X-ray visualization of the superior **vena** prior to injection of the shunt with contrast agent. Shuntograms are done with fine-bore needles. The venous **pressure** is also measured. The entry of contrast into the **vena cava** without pooling indicates a patent venous limb. The contrast will empty from the venous tubing with forceful inspiration if the entire system is patent. The venous **tube** will not clear if the valve or peritoneal collecting **tubes** are blocked. Only the valve and collecting **tube** need then be replaced if contrast enters the cava but does not leave the venous...

...the venous tubing establishes a satisfactory washout prior to wound closure. Fresh clots in the **vena** cava can be dissolved by the slow injection of streptokinase into the venous tubing. Other patent...

15/3,K/14 (Item 14 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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04315630 BIOSIS NO.: 000078045173

EXTRACORPOREAL CIRCULATION FOR RENAL CELL CARCINOMA WITH SUPRADIAPHRAGMATIC VENA CAVAL THROMBI

AUTHOR: KLEIN F A; SMITH M J V; GREENFIELD L J
AUTHOR ADDRESS: DIV. UROL., DEP. SURGERY, MED. COLL. VIRGINIA, VIRGINIA
COMMONWEALTH UNIV., RICHMOND, VA.

JOURNAL: J UROL 131 (5). 1984. 880-883. FULL JOURNAL NAME: Journal of Urology

CODEN: JOURA

RECORD TYPE: Abstract LANGUAGE: ENGLISH

- ABSTRACT: Extension of tumor into the **vena** cava occurs in 5-10% of the cases of renal cell carcinomas. Of these cases 14...
 - ...atrium. Acceptable techniques for dealing with this situation include cross-clamping the atrium, using positive **pressure** ventilation and **extracting** the **thrombus** with a Fogarty or Foley **catheter**, and extracorporeal circulation or a cardiopulmonary bypass with open excision of the tumor extension. Since...
 - ...men and 2 women, mean age 56 yr, with clear cell renal carcinomas and supradiaphragmatic **vena** caval tumor extension (1 with additional pulmonary embolism) were seen. None had other evidence of...
 - ... Each patient was explored with the planned use of extracorporeal circulation or cardiopulmonary bypass, Greenfield **vena** caval filter insertion and standard radical nephrectomy. Resection was not done in 1 patient with...
 - ...and supradiaphragmatic tumor thrombus. The use of extracorporeal circulation and postextraction insertion of the Greenfield **vena** caval filter offers the surgeon the advantage of direct visualization and better **vascular** control in **removing** the **thrombus**, as well as protection from the possibility of postextraction pulmonary embolism. With the combined use...

15/3,K/15 (Item 15 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 1999 BIOSIS. All rts. reserv.

04215057 BIOSIS NO.: 000077041102

TECHNIQUE OF VASCULAR INJECTION IN A RAREFIED ATMOSPHERE

AUTHOR: O'NEILL J G; PINA J A E

AUTHOR ADDRESS: ANATOMIA FAC. CIEN. MED. UNIV. NOVA DE LISBOA.

JOURNAL: FOLIA ANAT UNIV CONIMBRIGENSIS (COIMBRA) 47 (0). 1978-1980 (1982). 107-118.

FULL JOURNAL NAME: Folia Anatomica Universitatis CONIMBRIGENSIS (Coimbra)

CODEN: FAUCA

RECORD TYPE: Abstract LANGUAGE: PORTUGUESE

ABSTRACT: A method of injecting hard-to-inject preparations into any **vascular** organ or specimen, using a steel container of internal diameter 60 cm and 0.5...

...covered on top by a removable transparent cover of acrylic material. Injections are made by **catheters** and **tubes** that traverse the cover and are connected to an individual manometer mounted outside cylinders, by which the **pressure** can be individually adjusted. Using suction, the various vessels can be cleaned out, **removing** blood, **clots** and air, then raising the **pressure** to inject the desired fluid. Better filling of even small caliber vessels can be achieved...

15/3,K/16 (Item 16 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

(c) 1999 BIOSIS. All rts. reserv.

03629086 BIOSIS NO.: 000074044663

CIRCULATORY AND RENIN RESPONSES IN MAN TO UNILATERAL REDUCTION OF THE RENAL PERFUSION PRESSURE

AUTHOR: GUAZZI M D; FIORENTINI C; OLIVARI M T; BARTORELLI A; MAGRINI F; BIANCARDI C

AUTHOR ADDRESS: IST. RICERCHE CARDIOVASC., VIA BONFADINI 214, 20138 MILANO, ITALY.

JOURNAL: CARDIOVASC RES 15 (11). 1981 (RECD. 1982). 637-642.

FULL JOURNAL NAME: Cardiovascular Research

CODEN: CVREA

RECORD TYPE: Abstract LANGUAGE: ENGLISH

ABSTRACT: The mechanisms of human renovascular hypertension are studied. Unilateral partial occlusion of a renal **artery** was accomplished using a balloon-tipped **catheter** for occlusive angiography in 7 normotensive and 17 primary hypertensive subjects. The renin and circulatory responses were studied during a 60 min reduction of the renal perfusion **pressure** (RPP) by 50% of control. This stimulus was considered to be safe and strong enough...

- ...min, reached a peak at 15 min was significantly higher than the baseline until the **occlusion** was **removed**; venous renin and venous arterial difference on the occluded side became elevated after the stimulus...
- ...renin release from the contralateral kidney became partially inhibited; in no case did systemic arterial **pressure**, heart rate or cardiac output change during the studies and renin and circulatory patterns were...
- ...but does not duplicate the circulatory response. This evidence applies to a 1 h renal **artery** occlusion and does not exclude the possibility that renin may have a role in a rise in blood **pressure** following renal **artery** stenosis of longer duration.

15/3,K/17 (Item 17 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 1999 BIOSIS. All rts. reserv.

03516042 BIOSIS NO.: 000073019122

OPERATIVE REMOVAL OF TUMOR THROMBUS FROM VENA CAVA IN HYPER NEPHROID CARCINOMA

AUTHOR: MOLITOR D; WEISSBACH L

AUTHOR ADDRESS: UROL. UNIVERSITAETSKLIN., D-5300 BONN-VENUSBERG.

JOURNAL: UROL AUSG A 20 (4). 1981. 187-189.

FULL JOURNAL NAME: Urologe Ausgabe A

CODEN: URGAB

RECORD TYPE: Abstract

LANGUAGE: GERMAN

...ABSTRACT: patient the vascular surgery consisits of cross clamping of the vena cava with free back-flow of the contralateral renal vein , cavotomy, insertion of a Fogarty catheter for occlusion of the suprarenal vena cava without blocking the liver veins and extraction of the thrombus .

15/3,K/18 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 1999 Inst for Sci Info. All rts. reserv.

05874723 Genuine Article#: XD616 No. References: 24

Title: Microsecond laser ablation of thrombus and gelatin under clear liquids: Contact versus noncontact

Author(s): Shangguan HQ (REPRINT); Casperson LW; Prahl SA Corporate Source: OREGON HLTH SCI UNIV, DEPT ELECT ENGN/PORTLAND//OR/97201 (REPRINT); OREGON MED LASER CTR,/PORTLAND//OR/97225

Journal: IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, 1996, V2, N4 (DEC), P818-825

ISSN: 1077-260X Publication date: 19961200

Publisher: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC, 345 E 47TH ST, NEW YORK, NY 10017-2394

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Abstract: Laser thrombolysis is a procedure for **removing** blood **clots** in occluded **arteries** using pulsed Laser energy. The laser light is delivered through an optical fiber to the...

...The ablation process is profoundly affected by whether the optical fiber tip is inside a **catheter** or is in contact with the thrombus, This study measured ablation efficiency of 1-mu s laser pulses to **remove** a porcine **clot** confined in a silicone **tube**. The cavitation process was investigated by visualizing laser-induced bubble formation on gelatin targets with Bash photography and measuring the acoustic transients with a **pressure** transducer, The laser spot size did not affect the mass of material removed. The efficiency...

...the noncontact ablation. Finally, the mass removed was closely correlated with the measured bubble expansion **pressure** .

15/3,K/19 (Item 1 from file: 73)

DIALOG(R) File 73: EMBASE

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07581993 EMBASE No: 1999070838

Standard surgical techniques and surgical indications for hypertensive intracerebral hemorrhage

Hondo H.

Dr. H. Hondo, Department of Neurosurgery, Tokushima Prefect. Central Hospital, 1-10-30 Kuramoto-cho, Tokushima-shi, Tokushima 770-8539 Japan Japanese Journal of Neurosurgery (JPN. J. NEUROSURG.) (Japan) 1999, 8/2 (69-76)

CODEN: JJNEE ISSN: 0917-950X

DOCUMENT TYPE: Journal; Conference Paper

LANGUAGE: JAPANESE SUMMARY LANGUAGE: ENGLISH; JAPANESE

NUMBER OF REFERENCES: 33

...method is most commonly employed. Various mechanical devices have been tested in attempts to improve clot removal, e.g. the Archimedes screw; a coaxial double cannula, the ultrasonic aspirator, and the water jet. Before surgery, the presence of vascular lesions (aneurysms, arteriovenous malformations (AVM), dural AVMs, cryptic AVMs, cavernous hemangiomas, and cerebral amyloid angiopathy...
...least 6 hours after onset. To avoid intraoperative bleeding, not more than 70% of the clot should be aspirated initially. Blood pressure must be carefully controlled during the aspiration procedure. The residual hematoma should be drained out...

15/3,K/20 (Item 2 from file: 73)

DIALOG(R) File 73: EMBASE

(c) 1999 Elsevier Science B.V. All rts. reserv.

07189676 EMBASE No: 1998083176

Controlled limb reperfusion: Clinical application

DE L'ETUDE DES ALTERATIONS BIOCHIMIQUES DU MUSCLE SQUELETTIQUE ISCHEMIE ET REPERFUSE A LA REPERFUSION CONTROLEE DES MEMBRES CHEZ DES PATIENTS EN ISCHEMIE AIGUE SEVERE

Defraigne J.O.; Limet R.

Prof. J.O. Defraigne, Service Chirurgie Cardio-Vasculaire, CHU Sart Tilman, 4000 Liege Belgium

Revue Medicale de Liege (REV. MED. LIEGE) (Belgium) 1998, 53/2 (91-97)

CODEN: RMLIA ISSN: 0035-3663 DOCUMENT TYPE: Journal; Article

LANGUAGE: FRENCH SUMMARY LANGUAGE: FRENCH; ENGLISH

NUMBER OF REFERENCES: 12

...patients with this technique. Two patients were admitted for a limb-threatening ischemia consecutive to **embolism**. After **removal** of the thrombi with a Fogarty's **catheter** and before reperfusion with the normal blood, a controlled limb reperfusion was performed by mixing...

...was infused during 30 min with a roller pump into the deep and superficial femoral **arteries**. The delivery conditions (temperature, flow and reinjection **pressure**) were closely monitored. In both cases, no post-operative complication was observed and the pedal...

15/3,K/21 (Item 3 from file: 73)

DIALOG(R) File 73: EMBASE

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06521145 EMBASE No: 1996165465

Treatment concept for acute deep vein thrombosis

BEHANDLUNGSKONZEPT BEI TIEFER BECKEN-BEINVENEN-THROMBOSE

Gloor B.; Muller M.; Largiader J.

Chirurgische Klinik, Kantonsspital, CH-6000 Luzern 16 Switzerland Swiss Surgery (SWISS SURG.) (Switzerland) 1996, -/3 (78-87)

CODEN: SWSUF ISSN: 1023-9332 DOCUMENT TYPE: Journal; Article

LANGUAGE: GERMAN SUMMARY LANGUAGE: GERMAN; ENGLISH

...contains the following operative proceeding: An incision is made in the groin or - for more **distal** thromboses - on the proximal end of the **clot**. For the **removal** of the **clot** in the iliac **vein** a Fogarty-**catheter** is used. Urokinase is administered through a **vein** puncture in the instep while the blood **flow** is blocked by a pneumatic cuff around the thigh. After at least 20-30 minutes...

15/3,K/22 (Item 4 from file: 73)

DIALOG(R) File 73: EMBASE

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03878062 EMBASE No: 1989047017

Total paradoxical air embolism during a routine obstetric procedure (cervical cerclage)

LETALE 'PARADOXE LUFTEMBOLIE' BEI GEBURTSHILFLICHER ROUTINEOPERATION (ZERVIXCERCLAGE)

Mitterschiffthaler G.; Berchtold J.P.; Anderl P.; Unterdorfer H. Klinik fur Anaesthesiologie und Allgemeine Intensivmedizin der Universitat, A-6020 Innsbruck Austria

Anaesthesist (ANAESTHESIST) (Germany) 1989, 38/1 (29-31)

CODEN: ANATA ISSN: 0003-2417

DOCUMENT TYPE: Journal

LANGUAGE: GERMAN SUMMARY LANGUAGE: ENGLISH

...we initially diagnosed venous air embolism intraoperatively because of typical symptoms (cyanosis, pulmonary dysfunction, and vascular obstruction) and aspiration of air from the subclavian catheter. We also suspected an arterial embolism due to prominent neurologic deficits. In spite of corrective...

... This very rare complication depends upon several conditions: (1) opened, non-collapsible veins; (2) a **pressure** gradient from outside to inside the veins; (3) a patent foramen ovale; and (4) a right atrial **pressure** greater than that on the left, which can cause an air embolism to either the...

15/3,K/23 (Item 5 from file: 73)

DIALOG(R) File 73: EMBASE

(c) 1999 Elsevier Science B.V. All rts. reserv.

D3725024 EMBASE No: 1988174460

Hickman catheter for haemodialysis in paediatric patients

Pillion G.; Maisin A.; Macher M.A.; Bourquelot P.; Loirat C.

Service de Nephrologie Pediatrique, Hopital Robert Debre, F-75019 Paris France

Pediatric Nephrology (PEDIATR. NEPHROL.) (Germany) 1988, 2/3 (318-319)

CODEN: PEDNE ISSN: 0931-041X

DOCUMENT TYPE: Journal

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

...external or internal jugular vein and the tip located in the right atrium or superior vena cava. Mean blood flow was 25-55 ml/min with single lumen catheters and 83-100 ml/min with double lumen catheters. Three catheters had to be removed because of obstruction, whilst seven remained in situ until an arteriovenous fistula had matured or renal function was...

15/3,K/24 (Item 6 from file: 73)

DIALOG(R) File 73: EMBASE

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03611674 EMBASE No: 1988061110

Dynamics of invasive pressure monitoring systems: Clinical and laboratory evaluation

Gibbs N.C.; Gardner R.M.

Department of Medical Informatics, LDS Hospital/University of Utah, Salt

Lake City, UT 84143 United States

Heart and Lung: Journal of Critical Care (HEART LUNG J. CRIT. CARE) (United States) 1988, 17/1 (43-51)

CODEN: HELUA ISSN: 0147-9563

DOCUMENT TYPE: Journal

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Seven **pressure** monitoring systems were evaluated in the clinical setting and in the laboratory to assess their adequacy for recording invasive blood **pressures**. We found that a large number of systems used in the clinical setting gave erroneous **pressure** results because of inadequate dynamic response. Results of testing similar systems in the clinical setting...

- ...of the variability of the dynamic characteristics of systems in the clinical setting; (2) simple **catheter** transducer system setups performed better, suggesting that simple 'kits' be used; (3) membrane domes perform ...
- ...4) extension tubing was detrimental to the dynamic response of all systems, especially for pulmonary **artery** catheters. Fast-flush testing of **pressure** monitoring systems is needed to ensure the adequacy of dynamic response characteristics in the clinical...
- ...flush characteristics are inadequate, physicians and nurses have the opportunity to troubleshoot the system and **remove air bubbles** and excessive tubing and to properly attach the transducer domes until optimal characteristics are obtained.

15/3,K/25 (Item 7 from file: 73)

DIALOG(R) File 73: EMBASE

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01315086 EMBASE No: 1979035732

Air embolism: A complication during neurosurgery in the sitting position LUFTEMBOLIE. EINE KOMPLIKATION BEI NEUROCHIRURGISCHEN EINGRIFFEN IN SITZENDER POSITION

Krier C.; Wiedemann K.
Abt. Anasthesiol., Chir. Zent., Univ. Heidelberg Germany
Praktische Anasthesie Wiederbelebung und Intensivtherapie (PRAKT.
ANAESTH. WIEDERBELEB. INTENSIVTHER.) (Germany) 1978, 13/5 (386-397)

CODEN: PAWIA

DOCUMENT TYPE: Journal

LANGUAGE: GERMAN SUMMARY LANGUAGE: ENGLISH

...ultrasound method, continuous capnography during the duration of the operation, intra arterial measurement of blood **pressure**, recording of the central venous **pressure** and of electrocardiographic changes are essential means of routine monitoring. Suspected air embolism must be promptly dealt with not only by ligation of the severed **vein** but also by attempts at **aspiration** of the **air bubbles** via the atrial **catheter**. The latter, therefore, plays an important role both as a diagnostic parameter and a therapeutic...

15/3,K/26 (Item 8 from file: 73)

DIALOG(R) File 73: EMBASE

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00639556 EMBASE No: 1976195214

Reduced thrombus formation with silicone elastomere (silastic) umbilical artery catheters

Boros S.J.; Thompson T.R.; Reynolds J.W.; et al. Child. Hosp., St Paul, Minn. United States Pediatrics (PEDIATRICS) 1975, 56/6 (981-986)

CODEN: PEDIA

DOCUMENT TYPE: Journal LANGUAGE: ENGLISH

This report describes clinical experience with a radiopaque silicone elastomere (Silastic) umbilical artery catheter. Twenty infants, ten with polyvinyl chloride (PVC) umbilical artery catheters and ten with Silastic umbilical artery catheters , all positioned at the aortic bifurcation, had aortograms performed at the time of catheter removal. Catheter associated thrombus formation was observed in nine of the ten infants (90%) with PVC umbilical artery catheters and in one of the ten infants (10%) with Silastic catheters. The incidence of lower extremity vasospasm associated with the two catheters was not significantly different. Aortic pressure tracings recorded through Silastic catheters were accurate, but slightly damped. Autopsies were performed on five additional infants who died with indwelling Silastic umbilical artery catheters . None of the catheters , nor their surrounding tissues, showed evidence of thrombus formation on either gross or microscopic examination. It is our experience that radiopaque silicone elastomere tubing can be used as an umbilical catheter and appears to have the advantage of being less thrombogenic than the standard PVC tubing...

15/3,K/27 (Item 9 from file: 73)

DIALOG(R)File 73:EMBASE

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00032858 EMBASE No: 1974022888

Sagittal sinus repair: technical note

Donaghy R.M.P.; Wallman L.J.; Flanagan M.J.; Numoto M. Univ. Vermont Coll. Med., Burlington, Vt. United States

Journal of Neurosurgery (J. NEUROSURG.) 1973, 38/2 (244-248)

CODEN: JONSA

DOCUMENT TYPE: Journal LANGUAGE: ENGLISH

...beyond the point of simple patching is described. The procedure

involves immediate implantation of a vascular T tube which is later replaced by an intima lined stent. The method makes possible sinography and aspiration of clots, and a rapid replacement of continuity of blood flow.

15/3,K/28 (Item 1 from file: 94)

DIALOG(R) File 94: JICST-EPlus

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04309749 JICST ACCESSION NUMBER: 98A0124579 FILE SEGMENT: JICST-E Study of vessel injury by Adherent Clot removal catheter.

IKUTAKA TOSHIHARU (1); ISHIGURO MOTOYUKI (1); EHARA HIDETOSHI (1); ISHIHARA TAKESHI (1); HIRANO TAKAHIRO (1); HASHIMOTO KAZUAKI (2); HAYAKAWA YUKIHIRO (2); FUJIWARA HISAYOSHI (2)

(1) Seikokai Hirano Sogo Byoin; (2) Gifu Univ.

Nippon Toseki Igakkai Zasshi (Journal of Japanese Society for Dialysis Therapy), 1997, VOL.30, NO.12, PAGE.1375-1379, FIG.5, REF.5

JOURNAL NUMBER: X0954ABA ISSN NO: 1340-3451

UNIVERSAL DECIMAL CLASSIFICATION: 615.472/.473 626.6-08+ LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

...ABSTRACT: two catheters were the same in the comparative study, we used the Adherent Clot removal catheter to cure the obstructive thrombus of an expanded polytetrafluoroethylene graft. Removal with the Adherent Clot removal catheter was followed by removal with the Fogarty catheter in 4 cases. All procedures in our patients succeeded in removing the thrombus and returning the blood flow of hemodialysis access. Microscopically, neither the blood vessel element nor the graft element was found to be included in the removed thrombus. Adherent Clot removal catheter is safe and effective for removal of a graft thrombus that a Fogarty catheter fails to remove. (author abst.)

15/3,K/29 (Item 2 from file: 94)

DIALOG(R) File 94: JICST-EPlus

(c)1999 Japan Science and Tech Corp(JST). All rts. reserv.

03849365 JICST ACCESSION NUMBER: 97A0292241 FILE SEGMENT: JICST-E Successful pulmonary thromboendarterectomy in a patient with chronic pulmonary thromboembolism.

HIRĀI MASAYĀ (1); MAKI SHIGEO (1); YASUDA TAKASHI (1); KONDO MASAFUMI (1); SHINOHARA TAKASHI (1)

(1) Fed. of Natl. Public Serv. and Affil. Personnel Mutual Aid Assoc., Meijo Hosp.

Nippon Kyobu Geka Gakkai Zasshi (Journal of the Japanese Association for Thoracic Surgery), 1997, VOL.45, NO.2, PAGE.149-154, FIG.6, TBL.1, REF 19

JOURNAL NUMBER: Z0767AAJ ISSN NO: 0369-4739 UNIVERSAL DECIMAL CLASSIFICATION: 616.2-089

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Short Communication MEDIA TYPE: Printed Publication

- ...ABSTRACT: remarkable pulmonary hypertension and we were prompted to do cardiac catheterization. The catheterization showed the **pressure** of the main pulmonary **artery** (PA) as 84/14 (36)mmHg and PA angiography showed a massive embolus in the...
- ...In a median sternotomy, a cardiopulmonary bypass was established with ascending aortic and two caval **cannulae**. During cooling, the right PA was mobilized within the pericardial reflection. An incision was made

...removed. Post-operative PA angiography showed remaining thrombus in the

right lower PA, but the **pressure** of the main PA fell to 27/12 (18)mmHg. Pulmonary thromboendarterectomy by median sternotomy with the aid of deep hypothermia and circulatory arrest was useful to **remove** the **thrombus** in the bilateral PA, and to obtain good hemodynamic and symptomatic results. (author abst.)

15/3,K/30 (Item 3 from file: 94)

DIALOG(R) File 94: JICST-EPlus

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03385958 JICST ACCESSION NUMBER: 96A0776520 FILE SEGMENT: JICST-E Therapy for Acute Pulmonary Embolism in Patients with Contraindication for Thrombolysis.

INOUE ICHIRO (1); TAKANASHI ATSUSHI (1); FUKUDA YUKIHIRO (1); SAKAI KEN'YA (1); SUENAGA KENJI (1); WAKAMOTO ATSUO (1); FUJIOKA YOSHIMI (1); KAWAMOTO YUKIHIKO (1); HAMASAKI OSAMU (1)

(1) Koritsumiyoshichuobyoin

Myakkangaku(Journal of Japanese College of Angiology), 1996, VOL.36, NO.8, PAGE.427-430, FIG.2, TBL.1, REF.17

JOURNAL NUMBER: Z0216BAD ISSN NO: 0387-1126

UNIVERSAL DECIMAL CLASSIFICATION: 616.2-089

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Short Communication MEDIA TYPE: Printed Publication

...ABSTRACT: patients with acute cerebral hemorrhage or craniotomy and 2 elderly patient. Group I received the clot aspiration by a large lumen-guiding catheter, the mechanical clot fragmentation by a guidewire, and the percutaneous implantation of inferior vena cava filter. Success rates of the clot aspiration, the mechanical clot fragmentation, and the implantation of filter were 50%, 100%, and 100%, respectively. Thrombolytic therapy with urokinase was performed in Group II. Although there was no difference in the systolic pulmonary pressure (50.+-.16 in Group I vs 52.+-.9mmHg in Group II), the normalization time of pulmonary pressure was shorter in Group II than that in Group I (0.8.+-.0.7 vs 2.1.+-.1.2 days). In conclusion, the clot aspiration by the guide catheter, the mechanical clot fragmentation by the guidewire, and the percutaneous implantation of the inferior vena cave filter should be firstly considered in patients with contraindication for thrombolysis therapy. (author abst.)

15/3,K/31 (Item 4 from file: 94)

DIALOG(R) File 94: JICST-EPlus

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03333809 JICST ACCESSION NUMBER: 96A0681906 FILE SEGMENT: JICST-E Embolectomy by Catheter for Acute Pulmonary Thromboembolism.

TAKANASHI ATSUSHI (1); INOUE ICHIRO (1); INOUE TOSHIAKI (1); SAKAI KEN'YA (1)

(1) Koritsumiyoshichuobyoin

Myakkangaku(Journal of Japanese College of Angiology), 1996, VOL.36, NO.7, PAGE.387-394, FIG.4, TBL.2, REF.21

JOURNAL NUMBER: Z0216BAD ISSN NO: 0387-1126

UNIVERSAL DECIMAL CLASSIFICATION: 616.2-08 616.12-08 LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

ABSTRACT: 10 patients who suffer acute pulmonary embolism were treated with pulmonary embolectomy by catheter devices in Department of Cardiology, Miyoshi General Hospital, in 1994. Small pieces of thrombus were aspirated by conventional diagnostic 8Fr. catheters in 8 of 10 patients. In 2 cases with massive pulmonary embolus, many pieces of thrombus were aspirated. In 6 cases with massive or

relatively small embolus, a few pieces were aspirated. Urokinase... ... Angiographical improvement was observed after pulmonary embolectomy, but massive embolus was still observed in pulmonary arteries . So

urokinase and heparin were continued for additional 3-7 days. Decrease of pulmonary systolic pressure in these 8 cases was 13.9.+-.8.7mmHq, which was bigger than mean 7...

...1.4mmHg decrease of 2 cases treated with only injection of urokinase and heparin. Greatest pressure decrease of 31mmHg was earned in case with massive thrombi in which many pieces of thrombus was aspirated . No

piece was removed by pulmonary embolectomy in 2 cases. One of them was

...embolism and the other died of collapse immediately because of massive embolism. Pulmonary embolectomy by catheter devices improve pulmonary blood flow and help thrombus to lyse immediately. In addition, pulmonary embolectomy...

15/3,K/32 (Item 5 from file: 94)

DIALOG(R) File 94: JICST-EPlus

chronic...

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JICST ACCESSION NUMBER: 96A0436808 FILE SEGMENT: JICST-E Removal of Intraventricular Casting Hematoma and Subarachnoid Clots in Acute Subarachnoid Hemorrhage.

TANIKAWA ROKUYA (1); KAMIYAMA HIROYASU (1); KOBAYASHI NOBUMITSU (1); TAKAMURA HARUO (1)

(1) Asahikawa Red Cross Hosp.

Nosotchu no Geka(Surgery for Cerebral Stroke), 1996, VOL.24,NO.2, PAGE.129-135, FIG.3, TBL.4, REF.4

JOURNAL NUMBER: X0801AAU ISSN NO: 0914-5508

UNIVERSAL DECIMAL CLASSIFICATION: 616.83-089

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

- ... ABSTRACT: serious cases. Intraventricular casting hematoma: Intraventricular casting hematoma is often found in ruptured anteiror communicating artery aneurysm, and anterior interhemispheric approach (AIH) is used to clip the aneurysm. Intraventricular casting hematoma complicated with anterior communicating artery aneurysm, in many cases, ranges from the anterior horn of the lateral ventricle, to the...
- ...ventricle can be treated via the foramen of Monro. After removal of the hematoma, drainage tubes are placed in the trigone and third ventricle to control the intracranial pressure . Subarachnoid clot: For subarachnoid hemorrhage in the acute stage, the irrigation suction system is applied...
- ...is 500ml of saline mixed with 60,000 units of urokinase compressed to 400mmqG, to remove the subarachnoid clots as much as possible. In severe subarachnoid hemorrhage with Fisher Group 3 or more, the sylvian fissure is opened widely from the distal part to remove clots . (author abst.)

(Item 6 from file: 94) 15/3,K/33

DIALOG(R) File 94: JICST-EPlus

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JICST ACCESSION NUMBER: 94A0909092 FILE SEGMENT: JICST-E Strategy of Treatment for Acute Massive Pulmonary Embolism in Patients with Contraindication for Thrombolysis.

INOUE ICHIRO (1); TAKANASHI ATSUSHI (1); INOUE TOSHIAKI (1); YAMAUCHI RYO (1); KODAMA NOBUYA (1); TERADA MITSUKAZU (1); HATA JIRO (1); YOSHIDA

YASUHIRO (1); WAKAMOTO ATSUO (1)

'(1) Miyoshichuobyoin

Myakkangaku (Journal of Japanese College of Angiology), 1994, VOL.34, NO.10, PAGE.875-879, FIG.4, TBL.1, REF.14

JOURNAL NUMBER: Z0216BAD ISSN NO: 0387-1126 UNIVERSAL DECIMAL CLASSIFICATION: 616.12-089

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

- \dots ABSTRACT: were no differences in the age and the symptoms of onset. Group I received the clot aspiration by a large lumen-quiding catheter , the mechanical clot fragmentation by a quidewire, and the percutaneous implantation of inferior vena cava filter. Success rates of the clot aspiration, the mechanical clot fragmentation, and the implantation of filter were 25%, 100%, and 100%, respectively. Thrombolytic therapy with...
- ...units) was performed in Group II. Although there was no difference in the systolic pulmonary pressure (52.2.+-.6.8 in Group I vs 50.4.+-.4.5mmHg in Group II), the normalization time of pulmonary pressure was shorter in Group II than that in Group cardiac arrest unresponsive to cardiopulmonary resuscitation...
- ...other cases in both groups were discharged without reattack of pulmonary embolism. In conclusion, the clot aspiration by the quide catheter , the mechanical clot fragmentation by the guidewire, and the percutaneous implantation of the inferior vena cava filter should be considered in patients with contraindication for thrombolysis therapy. (author abst.)

15/3,K/34 (Item 7 from file: 94)

DIALOG(R) File 94: JICST-EPlus

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JICST ACCESSION NUMBER: 93A0481862 FILE SEGMENT: JICST-E A Blind Point of Vent Catheter: Air Aspiration.

INUI KIYOSHIGE (1); ORITA HIROYUKI (1); SHIMANUKI TAKAO (1); FUKASAWA MANABU (1); GOTO SATOSHI (1); NAKAMURA CHIHARU (1); WASHIO MASAHIKO (1) (1) Yamagata Univ.

Kyobu Geka (Japanese Journal of Thoracic Surgery), 1993, VOL.46, NO.5, PAGE.419-422, FIG.4, TBL.3, REF.5

ISSN NO: 0021-5252 JOURNAL NUMBER: Z0662AAL

UNIVERSAL DECIMAL CLASSIFICATION: 616.1-09

COUNTRY OF PUBLICATION: Japan LANGUAGE: Japanese

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

ABSTRACT: We experienced a case of saphenous vein air embolism after coronary artery bypass graft, in which case we used vent catheter kept in the left atrium. Though it was considered that air were never aspirated through vent catheter, we speculated that the origin of air bubblesmust be the vent catheter . And we made an experiment on the motion of air in the vent catheter using a model of left heart composed with soft reserver (atrium) and pulsatile pump (ventricle). When the pulsatile pump was arrest, the air were never aspirated from the vent catheter to the soft reserver even if we vented with strong negative pressure . But, when the pulsatile pump was in motion and the left atrium was vented with some negative pressure, some leaks of air bubbles were recognized. So we must pay much more attension to...

...when the heart is in motion. Sometimes we use overpressure safety valve composed with vent catheter , but measured left atrial pressure showed that decreased left atrial pressure was only 2mmHg. So its use

15/3,K/35 (Item 1 from file: 144)

DIALOG(R) File 144: Pascal

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12656682 PASCAL No.: 96-0351959

Salvage of ischemic myocardium with simplified and even delayed coronary sinus retroperfusion. Discussion

ALDEA G S; ZHANG X; RIVERS S; SHEMIN R J; ENGELMAN R M comment; SPOTNITZ H M comment; KAISER G C comment

Department of Cardiothoracic Surgery, Boston University Medical Boston, Boston, Massachusetts, United States

Annual Meeting of The Society of Thoracic Surgeons, 32 (Orlando, FL USA) 1996-01-29

Journal: The Annals of thoracic surgery, 1996, 62 (1) 9-15 Language: English

Background. Despite the proven efficacy of **pressure** -controlled intermittent coronary sinus obstruction (PICSO) and synchronized retrograde perfusion (SRP) in salvaging ischemic myocardium...

- ...To address these concerns a simplified retroperfusion technique (SR) was developed that continuously infuses superior **vena** caval blood at 7 mL/min into the CS **catheter** without balloon occlusion. Methods. Thirty pigs underwent 90 minutes of ischemia imposed by snaring the two largest diagonal branches of the left anterior descending **artery** and were randomized to one of five treatment groups: One group received no retroperfusion (control...
- ... initial 60 minutes of ischemia was followed by 30 minutes of delayed SR with superior **vena** caval blood. All animals were then placed on cardiopulmonary bypass and, after a 60-minute cardioplegic arrest, the coronary **artery obstructions** were **removed**, to simulate surgical revascularization. This was followed by 3 hours of reperfusion. The area of ...
- ...2% for delayed SR (p < 0.01 for each group versus control). The mean CS pressure (in mm Hg) during treatment was 6.3 +- 1.7 for the control group, 2

15/3,K/36 (Item 1 from file: 149)
DIALOG(R)File 149:Health&Wellness DB(SM)
(c) 1999 The Gale Group. All rts. reserv.

01766303 SUPPLIER NUMBER: 20582095 (USE FORMAT 7 OR 9 FOR FULL TEXT) Neonatal respiratory distress in the community hospital: when to transport, when to keep. (Clinical Review)

Hein, Herman A.; Ely, John W.; Lofgren, Maria A. Journal of Family Practice, v46, n4, p284(6) April,

1998

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0094-3509 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional WORD COUNT: 4460 LINE COUNT: 00372

 \ldots can be passed around the base of the cord and tightened if necessary.

Any obvious **clot** should be **removed** from the umbilical **vein**, and then a fluid-filled No. 5 or 8 French **catheter** should be inserted until a free **flow** of blood is obtained. (The two small dark dots (clotted blood) represent umbilical arteries; the...

15/3,K/37 (Item 2 from file: 149)
DIALOG(R)File 149:Health&Wellness DB(SM)

(c) 1999 The Gale Group. All rts. reserv.

01265050 SUPPLIER NUMBER: 10421327

Laser coronary angioplasty.

Medical Letter on Drugs and Therapeutics, v33, n836, p7(1)

Jan 25,

1991

PUBLICATION FORMAT: Newsletter ISSN: 0025-732X LANGUAGE: English

RECORD TYPE: Abstract TARGET AUDIENCE: Professional

ABSTRACT: Percutaneous transluminal coronary angioplasty (PTCA) is a procedure in which a balloon-tipped **catheter** is threaded into a coronary **artery** that is narrowed by fatty plaques (atherosclerosis). Inflation of the balloon reduces or **removes** the **blockage**, improving blood **flow** and decreasing signs of coronary artery disease such as angina (chest pain). PTCA has become...

15/3,K/38 (Item 3 from file: 149)
DIALOG(R)File 149:Health&Wellness DB(SM)

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01253119 SUPPLIER NUMBER: 08351035 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Does inappropriate use explain small-area variations in the use of health

care services?

Leape, Lucian L.; Park, Rolla Edward; Solomon, David H.; Chassin, Mark R.; Kosecoff, Jacqueline; Brook, Robert H.

JAMA, The Journal of the American Medical Association, v263, n5, p669(4) Feb 2,

1990

PUBLICATION FORMAT: Magazine/Journal ISSN: 0098-7484 LANGUAGE: English RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional WORD COUNT: 2253 LINE COUNT: 00235

...ABSTRACT: differences in appropriateness of use. The medical procedures evaluated were coronary angioplasty (dilating a coronary artery to improve blood flow), carotid endarterectomy (surgery to remove blockage from the carotid artery), and upper gastrointestinal tract endoscopy (insertion of a tube into the stomach to view its lining). Criteria for appropriate use of these procedures were...

15/3,K/39 (Item 4 from file: 149)
DIALOG(R)File 149:Health&Wellness DB(SM)
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01223817 SUPPLIER NUMBER: 09236758

Angiography, angioscopy, and ultrasound imaging before and after percutaneous balloon angioplasty.

Siegel, Robert J.; Chae, Jang-Seong; Forrester, James S.; Ruiz, Carlos E. American Heart Journal, v120, n5, p1086(5)

Nov, 1990

PUBLICATION FORMAT: Magazine/Journal ISSN: 0002-8703 LANGUAGE: English RECORD TYPE: Abstract TARGET AUDIENCE: Professional

ABSTRACT: Angiography, serial X-raying of **blood vessels** after injection of a dye, can show the contours of **blood vessels**, while angioscopy, which involves threading a microscopic **tube** into vessels, and ultrasound imaging can provide information about abnormalities of vessel surfaces and walls...

...three methods were used before and after percutaneous transluminal angioplasty (PTA), in which a balloon **catheter** is threaded into a constricted **blood vessel** and then inflated. The first patient was a 72-year-old man with claudication (leg...

...had no pulse in the right foot. Angiography showed 75 percent narrowing of a leg artery due to atherosclerosis, while angioscopy showed a clot.

The **clot** was **aspirated**. Ultrasound confirmed atherosclerotic narrowing and suggested calcification of the area, so that high **pressures** would be needed during balloon inflation. Following inflation, only a 25 percent narrowing remained, and...

...indicated the patient had an atherosclerotic plaque next to an area of complete blockage. Following **catheter** inflation, the area was found to be 65 percent constricted, and angioscopy and ultrasound but...

...surface. The study demonstrates that angiography is best for analysis of an entire area of **blood vessels**, while angioscopy is best for evaluating the vessel surface, and ultrasound provides information about the...

...techniques should lead to improved patient treatment and should improve understanding of disease processes in **blood vessels**. (Consumer Summary produced by Reliance Medical Information, Inc.)

15/3,K/40 (Item 5 from file: 149)
DIALOG(R)File 149:Health&Wellness DB(SM)
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01178329 SUPPLIER NUMBER: 08151415

Favorable outcome of neonatal aortic thrombosis and renovascular hypertension.

Caplan, Michael S.; Cohn, Richard A.; Langman, Craig B.; Conway, James A.; Shkolnik, Arnold; Brouillette, Robert T. Journal of Pediatrics, v115, n2, p291(5) August,

1989
PUBLICATION FOR

PUBLICATION FORMAT: Magazine/Journal ISSN: 0022-3476 LANGUAGE: English RECORD TYPE: Abstract TARGET AUDIENCE: Professional

ABSTRACT: Umbilical catheters, small tubes inserted into the umbilical artery, are sometimes used in the treatment of sick newborns. A common complication of the umbilical catheter is aortic thrombosis, the formation of a clot in the infant's aorta, which is the large blood vessel leading from the heart. Another complication of their use is renovascular hypertension, high blood pressure caused by closed arteries supplying the kidneys. Controversial treatments of affected newborns include surgical removal of the clots, the administration of clot-dissolving drugs and drugs which act to lower blood pressure, or removal of the affected kidney. A group of 15 newborns who survived these complications...

...increased amount of renin, an enzyme produced by the kidney, which acts to increase blood **pressure** . The flow of blood to the kidneys was abnormal in 10 of the 11 infants...

...All of the children, at the time of the follow-up study, had normal blood **pressures** and all but one infant had achieved a normal height. All children had normal renin...

...increased in advanced kidney disease) and normal filtration rates of the glomerulus, a cluster of **blood vessels** in the kidney. The three infants having no blood flow to the kidney had no...

...some kidney perfusion was improved by initial aggressive treatment with drugs to lower high blood **pressure**. The amount of these antihypertensive drugs required decreased over the two years, the result of...

15/3,K/41 (Item 6 from file: 149)
DIALOG(R)File 149:Health&Wellness DB(SM)
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01069947 SUPPLIER NUMBER: 03075396 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Doctor, you have six minutes: the heart-lung machine finally released surgeons from the tyranny of the clock.

Comroe, Julius H., Jr. Science'84, v5, p62(7) Jan-Feb, 1984

DOCUMENT TYPE: biography PUBLICATION FORMAT: Magazine/Journal LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Academic WORD COUNT: 3049 LINE COUNT: 00281

interrupted at 8:05 A.M., when he could no longer detect Edith's blood **pressure**. The surgical team moved quickly, opening the young woman's chest and slipping a rubber **tube** aroun the pulmonary artery to stop any blood flowing past the clot through the artery. Then they opened the artery and **removed** the blood **clots** from it and from both of its main branches. As they closed the opening in the **artery**, the clock read 8:12 A.M. The operation had taken seven minutes. The patient...

15/3,K/42 (Item 1 from file: 151)

DIALOG(R) File 151: HealthSTAR

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03140570 98225389

[From the study of biochemical changes in ischemic and reperfused skeletal muscle to the controlled reperfusion of limbs in patients with acute severe ischemia]

De l'etude des alterations biochimiques du muscle squelettique ischemie et reperfuse a la reperfusion controlee des membres chez des patients en ischemie aigue severe.

Defraigne JO; Limet R

Universite de Liege, Service de Chirurgie cardio-vasculaire.

Rev Med Liege (BELGIUM) Feb 1998, 53 (2) p91-7,

ISSN: 0035-3663 JOURNAL CODE: SM9

Languages: FRENCH Summary Languages: ENGLISH Document Type: JOURNAL ARTICLE English Abstract

...limb-threatening ischemia consecutive to embolism. After removal of the thrombi with a Fogarty's **catheter** and before reperfusion with the normal blood, a controlled limb reperfusion was performed by mixing...

...was infused during 30 min with a roller pump into the deep and superficial femoral **arteries**. The delivery conditions (temperature, flow and reinjection **pressure**) were closely monitored. In both cases, no post-operative complication was observed and the pedal...

15/3,K/43 (Item 2 from file: 151)

DIALOG(R) File 151: HealthSTAR

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02668733 96112571

[Experience with the Groshong port in a home TPN patient--a case report]
Inoue Y; Soh H; Nakamura T; Komoda H; Hoki M; Honda M; Sunada S; Takao T
Dept. of Gastrointestinal and General Surgery, Osaka Prefectural
Hospital.

Gan To Kagaku Ryoho (JAPAN) Dec 1995, 22 Suppl 4 p378-83,

ISSN: 0385-0684 JOURNAL CODE: 6T8

Languages: JAPANESE Summary Languages: ENGLISH Document Type: JOURNAL ARTICLE English Abstract

...head cancer, was treated with home TPN. The Groshong port was inserted via external jugular **vein** and stayed at home for 8 months with home TPN. Lipid emulsion was administered twice a week. After administration of lipid emulsion, 20 ml of saline was injected and **catheter** lock was performed with only saline. Heparin was not used for **catheter** lock. After 8 months' home TPN, patient died. We could not find any precipitate in the **catheter** and reservoir. A unique feature of Groshong port is a **pressure** -sensitive

two-way valve at the intravascular end. The valve of this port opens outward...

...closed between -7 and 80 mmHq, it will not open spontaneously under normal central venous pressure conditions. This valve eliminates the need for heparin flusing. Catheter obstruction during prolonged TPN is a serious complication. Compound of heparin, lipid emulsion and electrolytes, especially calcium is now becoming one of the most important causes of catheter obstruction and catheter removal . We used the Groshong port to prevent catheter obstruction. After 8 months' use of this port, no precipitate was found in this port. We conclude that the Groshong port is useful for home TPN catheter because it can prevent catheter obstruction due to heparin-lipid-electrolytes compound.

15/3,K/44 (Item 3 from file: 151)

DIALOG(R) File 151: HealthSTAR

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96244344

[Treatment concept in deep pelvic-leg venous thrombosis]

Behandlungskonzept bei tiefer Becken-Beinvenen-Thrombose.

Gloor B; Muller M; Largiader J

Chirurgische Klinik, Kantonsspital Luzern.

Swiss Surg (SWITZERLAND) 1996, (3) p78-86, discussion 86-7,

ISSN: 1023-9332 JOURNAL CODE: CDJ

Languages: GERMAN Summary Languages: ENGLISH Document Type: JOURNAL ARTICLE English Abstract

... contains the following operative proceeding: An incision is made in the groin or - for more distal thromboses - on the proximal end of the clot . For the removal of the clot in the iliac vein a Fogartycatheter is used. Urokinase is administered through a vein puncture in the instep while the blood flow is blocked by a pneumatic cuff around the thigh. After at least 20-30 minutes...

15/3,K/45 (Item 4 from file: 151)

DIALOG(R) File 151: HealthSTAR

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02386937 95093161

Mechanical thrombectomy with the Amplatz device: human experience.

Tadavarthy SM; Murray PD; Inampudi S; Nazarian GK; Amplatz K Minneapolis Heart Institute, Abbott Northwestern Hospital, MN 55407.

J Vasc Interv Radiol (UNITED STATES) Sep-Oct 1994, 5 (5) p715-24,

ISSN: 1051-0443 JOURNAL CODE: BER

Languages: ENGLISH

Document Type: CLINICAL TRIAL; CLINICAL TRIAL, PHASE I; JOURNAL ARTICLE

...PATIENTS AND METHODS: Preliminary data are presented for 14 patients treated with the Amplatz thrombectomy catheter . The procedure was carried out in 10 arterial polytetrafluorethylene grafts, in two native arteries , and in two patients with venous thrombosis. RESULTS: The thrombectomy catheter completely removed the clot in 11 patients and partially clot in three patients. Mean thrombectomy time was 2 minutes 45 seconds. Despite distal blood pressure cuff occlusion, two instances of insignificant distal embolization occurred. Mechanical clot dissolution has consistently produced...

...endarterectomy. CONCLUSION: Mechanical thrombectomy with this device is a new, effective technique and can rapidly remove the thrombus . From preliminary results, the device seems most promising in clearing out thrombi in occluded synthetic...

(Item 5 from file: 151) 15/3,K/46 DIALOG(R) File 151: HealthSTAR

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02338249 94356521

Studies of reperfusion injury in skeletal muscle: controlled limb reperfusion to reduce post-ischaemic syndrome.

Beyersdorf F; Sarai K; Mitrev Z; Eckel L; Ihnken K; Satter P Department of Thoracic and Cardiovascular Surgery, Johann Wolfgang Goethe-Universitat Frankfurt-am-Main, Germany.

Cardiovasc Surg (ENGLAND) Aug 1993, 1 (4) p330-6,

Languages: ENGLISH

Document Type: JOURNAL ARTICLE

...shown that these are caused, to a large extent, by normal reperfusion at normal systemic **pressure** and that this additional injury can be substantially reduced by controlled reperfusion of the revascularized...

...in cardiogenic shock, ten had a history of associated cardiac disease and seven coexistent peripheral vascular disease. After systemic heparinization, thromboembolectomy was undertaken using a Fogarty catheter. Cannulas were placed in the iliac, profunda and superficial femoral arteries and connected to a reperfusion set. Oxygenated blood was drawn from the iliac artery and mixed with an asanguineous solution (ratio 6:1). This controlled reperfusate was returned to the profunda and superficial femoral arteries using a single roller pump. The system allows control of both the composition of the reperfusate (Ca2+, pH, osmolarity, glucose, substrate, PO2, free radical scavengers) and the conditions of reperfusion (pressure, flow, temperature). After 30 min of controlled limb reperfusion, the cannulas were removed, the arteriotomy closed and normal blood reperfusion started. (ABSTRACT TRUNCATED AT 250 WORDS)

15/3,K/47 (Item 6 from file: 151)

DIALOG(R)File 151:HealthSTAR

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01343108 90003418

[Heart catheterization: experience with 1000 examinations]

K problematice srdecni katetrizace, zkusenosti s 1000 vysetreni.

Horky J; Yousof AM

Cesk Pediatr (CZECHOSLOVAKIA) Jul 1989, 44 (7) p417-9,

ISSN: 0069-2328 JOURNAL CODE: CW3

Languages: CZECH Summary Languages: ENGLISH Document Type: JOURNAL ARTICLE English Abstract

... The authors recommend to reduce the incidence of complications by continuous monitoring of the blood **pressure** during catheterization by means of an arterial **catheter**. As to complications, they recorded three deaths within 24 hours after catheterization: 2 infants and...

...Cardiac tamponade was described twice. In one infant on the second day after catheterization a thrombus was removed from the femoral artery. A computer proved useful for the calculation of haemodynamic data.

15/3,K/48 (Item 1 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 1999 Dialog Corporation. All rts. reserv.

09258199 97179897

[Successful repair of combined cardiac rupture and septal perforation after myocardial infarction]

Sakurai H; Maeda M; Sai N; Iwase J; Takemura H

Department of Cardiovascular Surgery, Shakaihoken Chukyo Hospital, Nagoya, Japan.

Nippon Kyobu Geka Gakkai Zasshi (JAPAN) Jan 1997, 45 (1) p73-8, ISSN 0369-4739 Journal Code: IKE

Languages: JAPANESE Summary Languages: ENGLISH Document type: JOURNAL ARTICLE English Abstract

... and hemostasis was obtained by dressing with local hemostatics. As hemodynamics improved, elevation of pulmonary artery pressure and a step-up in oxygen concentration in the pulmonary artery from a Swan-Ganz catheter sample appeared. A left-to-right shunt was observed in the operative field with color...

...sutures and thrombus adherent to the internal surface of the pericardial patch were observed. The **thrombus** was **removed** and the patch was reattached using both interrupted mattress sutures with felt pledgets and continuous...

15/3,K/49 (Item 2 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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09077718 96266207

Salvage of ischemic myocardium with simplified and even delayed coronary sinus retroperfusion [see comments]

Aldea GS; Zhang X; Rivers S; Shemin RJ

Department of Cardiothoracic Surgery, Boston University Medical Center, Massachusetts 02118-2393, USA.

Ann Thorac Surg (UNITED STATES) Jul 1996, 62 (1) p9-15, ISSN 0003-4975 Journal Code: 683

Comment in Ann Thorac Surg 1997 Apr; 63(4):1210-1

Languages: ENGLISH

Document type: JOURNAL ARTICLE

BACKGROUND. Despite the proven efficacy of **pressure** -controlled intermittent coronary sinus obstruction (PICSO) and synchronized retrograde perfusion (SRP) in salvaging ischemic myocardium...

- ...To address these concerns a simplified retroperfusion technique (SR) was developed that continuously infuses superior **vena** caval blood at 7 mL/min into the CS **catheter** without balloon occlusion. METHODS. Thirty pigs underwent 90 minutes of ischemia imposed by snaring the two largest diagonal branches of the left anterior descending **artery** and were randomized to one of five treatment groups: One group received no retroperfusion (control...
- ... initial 60 minutes of ischemia was followed by 30 minutes of delayed SR with superior **vena** caval blood. All animals were then placed on cardiopulmonary bypass and, after a 60-minute cardioplegic arrest, the coronary **artery obstructions** were **removed**, to simulate surgical revascularization. This was followed by 3 hours of reperfusion. The area of ...
- ...2% for delayed SR (p < 0.01 for each group versus control). The mean CS **pressure** (in mm Hg) during treatment was 6.3 +/-1.7 for the control group, 25...
- ... is considerably simpler. The simplified retroperfusion technique is inherently safer because of the lower CS **pressures** imposed by low flows and the lack of CS balloon obstruction. The efficacy of delayed...

15/3,K/50 (Item 3 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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05633816 90029880

Clinical experience with percutaneous intra-aortic balloon pumping in cardiogenic shock complicating acute myocardial infarction.

Liu PH; Jeng JR; Yang SP; Wang DJ; Shieh SM

Chung Hua I Hsueh Tsa Chih (TAIWAN) May 1989, 43 (5) p299-306, ISSN

· 0578-1337 Journal Code: CHQ

Languages: ENGLISH

Document type: JOURNAL ARTICLE

... 2.45 +/- 0.43 L/min/M2 (P less than 0.005), spontaneous systolic arterial **pressure** rose from 79 +/- 10 to 114 +/- 19 mmHg (P = 0.0001), heart rate dropped from 111 +/- 26 to 85 +/- 13 beats/min (P = 0.0001), pulmonary **artery** wedge **pressure** decreased from 29 +/- 5 to 16 +/- 3 mmHg (P = 0.0001), and urine output increased...

... of the 10 patients who underwent coronary angiogram were found a severe left anterior descending **artery** lesion. The main complication was leg ischemia, which was observed in 7 patients: 3 needed removal or replacement of balloon **catheter** and one required surgical **removal** of the **thrombus**. (ABSTRACT TRUNCATED AT 250 WORDS)

15/3,K/51 (Item 4 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 1999 Dialog Corporation. All rts. reserv.

05530773 89148689

[A fatal paradoxical air embolism during a routine obstetric procedure (cervical cerclage)]

Letale "paradoxe Luftembolie" bei geburtshilflicher Routineoperation (Zervixcerclage).

Mitterschiffthaler G; Berchtold JP; Anderl P; Unterdorfer H

Klinik fur Anaesthesiologie und Allgemeine Intensivmedizin, Universitat Innsbruck.

Anaesthesist (GERMANY, WEST) Jan 1989, 38 (1) p29-31, ISSN 0003-2417 Journal Code: 4MY

Languages: GERMAN Summary Languages: ENGLISH Document type: JOURNAL ARTICLE English Abstract

...we initially diagnosed venous air embolism intraoperatively because of typical symptoms (cyanosis, pulmonary dysfunction, and **vascular obstruction**) and **aspiration** of air from the subclavian **catheter**. We also suspected an arterial embolism due to prominent neurologic deficits. In spite of corrective...

... This very rare complication depends upon several conditions: (1) opened, non-collapsible veins; (2) a **pressure** gradient from outside to inside the veins; (3) a patent foramen ovale; and (4) a right atrial **pressure** greater than that on the left, which can cause an air embolism to either the...

15/3,K/52 (Item 1 from file: 159)

DIALOG(R) File 159: Cancerlit

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00229267 81693371 ICDB/81693371

LATE APPEARANCE OF PNEUMOTHORAX AFTER SUBCLAVIAN VEIN CATHETERISATION: AN ANAESTHETIC HAZARD (LETTER)

Mitchell A; Steer HW

Nuffield Dept. Surgery, John Radcliffe Hosp., Headington, Oxford OX3 9DU, England

Br Med J; 281(6251):1339 1980 ISSN 0007-1447

Languages: ENGLISH Document Type: LETTER

... treatment in a 61-yr-old woman with stomach cancer. A 14-G silicone rubber catheter was introduced into the right subclavian vein by the standard infraclavicular technique. The catheter was buried in a short sc tunnel. Four passes of the needle were made to...

 \dots the line. An anteroposterior chest x-ray, taken in inspiration after 30 min, showed the **catheter** in an acceptable position. The patient reported

mild pain in the tip of the right shoulder after the procedure. The catheter clotted and was removed after 5 days of parenteral feeding, 4 days after fiberoptic gastroscopy confirmed the diagnosis. Because...

... was inserted before laparotomy, to prevent the development of a tension pneumothorax during intermittent positive pressure ventilation. Laparotomy disclosed an inoperable stomach carcinoma. Palliative gastrojejunostomy was performed. The chest drain was removed 2 days later, and the patient recovered uneventfully. After the placement of a central catheter for preoperative parenteral nutrition, the early chest x-ray should be taken in expiration to...

15/3,K/53 (Item 1 from file: 442)

DIALOG(R) File 442: AMA Journals

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00089450

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Ruptured Abdominal Aortic Aneurysms A Community Experience (ARTICLE)

Archives of Surgery

Mar, 1994; ORIGINAL ARTICLE: p285

LINE COUNT: 00424

...may be used at the discretion of the surgeon. If it is not used, Fogarty catheters should be directed down the iliac arteries before completion of the distal anastomosis to remove any clots that may have formed during aneurysmal repair. The adequacy of the distal circulation must be...

15/3,K/54 (Item 2 from file: 442)

DIALOG(R) File 442: AMA Journals

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00039640

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Aortic Thrombosis After Umbilical Artery Catheterization; Successful Surgical Management (CLINICAL NOTES)

FLANIGAN, D. PRESTON; STOLAR, CHARLES J. H.; PRINGLE, KEVIN C.; SCHULER, JAMES J.; FISHER, ELIZABETH; VIDYASAGER, DHARMAPURI

Archives of Surgery

March, 1982; 117: 371-374

LINE COUNT: 00170 WORD COUNT: 02347

... leg. The brachial systolic pressure was 97 mm Hg (Fig 3, right). The umbilical artery catheter was removed. Occlusion of the lower aorta and both iliac arteries was confirmed by nuclear aortographic findings. A urokinase infusion was unsuccessful. The infant was taken...

15/3,K/55 (Item 3 from file: 442)

DIALOG(R) File 442: AMA Journals

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00039576

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Intraoperative Streptokinase; An Adjunct to Mechanical Thrombectomy in the Management of Acute Ischemia (PAPERS READ BEFORE THE 93RD ANNUAL MEETING OF THE WESTERN SURGICAL ASSOCIATION, ROCHESTER, MINN, NOV 17 TO NOV 20, 1985 -- PART 2)

COHEN, LEONARD H.; KAPLAN, MARK; BERNHARD, VICTOR M. Archives of Surgery

June, 1986; 121: 708-715

LINE COUNT: 00458 WORD COUNT: 06321

... 000 units of heparin sodium. After no further clot could be removed by standard balloon-catheter embolectomy, a static intraoperative angiogram was performed. Patient selection for intraoperative streptokinase infusion was based on the demonstration of residual thrombus that might threaten subsequent limb or organ viability. A catheter was passed through the open arteriotomy and positioned in close proximity to the clot. Streptokinase...

...the immediate postoperative recovery period. The procedure was concluded when arteriography showed restoration of distal vascular integrity, when no further clot lysis was achieved after instillation of four or five boluses...

... was ensured. Postoperative limb perfusion was documented by clinical assessment and the measurement of ankle pressures . The effectiveness of renal artery lytic therapy was estimated by renal isotope scans.

RESULTS

Twelve patients received 13 trials of...

15/3,K/56 (Item 4 from file: 442) DIALOG(R)File 442:AMA Journals

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00039446

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Transvenous Catheter Pulmonary Embolectomy (CLINICAL NOTES)

MOORE, JOHN H.; KOOLPE, HARVEY A.; CARABASI, R. ANTHONY; YANG, SHUIN-LIN; JARRELL, BRUCE E.

Archives of Surgery

December, 1985; 120: 1372-1375

LINE COUNT: 00145 WORD COUNT: 02013

...with tachypnea and tachycardia. Her PaO2 (FIO2=100%) was 30 mm Hg with a blood **pressure** of 45 mm Hg palpable on maximal doses of epinephrine hydrochloride and dopamine hydrochloride administered...

... angiography suite. Angiography revealed a massive PT involving both lungs (Fig 3). Using the transvenous-catheter -embolectomy technique, an 18-cm-long thrombus was removed from the right inferior pulmonary artery (Fig 4) within 110 minutes after the patient's arrival at the angiography suite. The patient's blood pressure immediately rose to 130/90 mm Hg, and the PaO2 increased to 70 mm Hg (FIO2=100%). The pulmonary fell from a mean of 45 mm Hg to 22/10 mm Hg. A artery pressure Greenfield...

15/3,K/57 (Item 5 from file: 442) DIALOG(R) File 442:AMA Journals

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00039090

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Routine Surgical Management of Brachial Artery Occlusion After Cardiac Catheterization (ORIGINAL ARTICLES)

KITZMILLER, JOHN W.; HERTZER, NORMAN R.; BEVER, EDWIN G.

Archives of Surgery

August, 1982; 117: 1066-1071

LINE COUNT: 00283 WORD COUNT: 03910

... at the time the balloon catheter was inflated was often helpful in determining whether the catheter had been passed into the radial artery

', the ulnar artery , or both.

After all distal thrombus had been removed , the brachial artery was gently dilated to its maximum diamter using graduated sounds, and a dilute solution of...

15/3,K/58 (Item 6 from file: 442)
DIALOG(R)File 442:AMA Journals

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00038640

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Vascular Complications Associated With Percutaneous Intra-aortic Balloon Pumping (SYMPOSIUM ON ASSISTED CIRCULATION AND EMERGENCY REVASCULARIZATION

TODD, GEORGE J.; BREGMAN, DAVID; VOORHEES, ARTHUR B.; REEMTSMA, KEITH

Archives of Surgery

August, 1983; 118: 963-964

LINE COUNT: 00129 WORD COUNT: 01788

... instances of clinically unrecognized aortic dissection in 45 patients. All of them had undergone balloon **catheter** insertion by the standard, rather than the percutaneous, technique. Since clinical signs and symptoms may not be evident immediately after balloon catheter insertion, we chose to calculate to incidence of **vascular** complications according to the total number of patients who survived until the balloon could be removed. On this basis, the total percentage of vascular complications was 22.4%, and the total percentage of patients requiring surgery was 13.4... ... avoidable and prompted the following suggestions: (1) Every effort should be made to insert the **catheter** just distal to the inguinal ligament so that a common femoral, rather than a superficial femoral, **artery** insertion is achieved. In our patients requiring thrombectomy, a superficial femoral artery insertion site was frequently noted. We think that when the 12 catheter sheath is inserted into the superficial femoral artery , flow through both this and the deep femoral artery is impeded, making distal ischemia as well as thrombosis around the catheter more likely to occur. (2) When the balloon catheter is removed, a jet of blood should be allowed to flush the vessel before applying pressure to control bleeding. Since the inception of this technique's use at our institution, we...

... vessel. (3) Doppler flow in the foot should be monitored during the period of femoral artery compression after catheter removal, and complete occlusion of the vessel should be avoided. (4) Patients who have undergone PIABP insertion after the femoral **artery** has been exposed in the operating room should undergo open removal of the **catheter**, with suture repair of the femoral **artery**. Both hemorrhagic complications in our series occurred in such patients, in whom the tamponading effects...

15/3,K/59 (Item 7 from file: 442)

DIALOG(R) File 442: AMA Journals

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00035250

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Clinical Effects of Closed Suction Drainage on Wound Healing in Patients With Head and Neck Cancer (ORIGINAL ARTICLES)

BALLANTYNE, GOEPFERT, ROBERT M.; ALANDO J.; HELMUTH; GUILLAMONDEGUI, OSCAR M.; LARSON, DAVID L.; MEDINA, JESUS

Archives of Otolaryngology

November, 1982; 108: 723-726

LINE COUNT: 00268 WORD COUNT: 03704 ...suction levels for days 3 through 7 (Table 2).

One potential caveat of high suction **pressure** levels was the possibility of bleeding induced by a rupture of nascent **capillary** buds and small vessels peripheral to drains in situ. Additionally, it was hypothesized that high negative **pressure** might encourage soft-tissue invagination into wound **catheter** fenestrations, creating effective occlusion and fluid buildup within the wound. Transition rates from a sanguinous to a serous character of exudate were judged as equivalent for all suction **pressure** levels, however, and active bleeding was diagnosed in only one patient beyond the first 24...

... included in this series. The comparative volumes collected between groups also suggested no increase in **catheter** fenestration **occlusion**. Drain **removal** was considered no more difficult in the group receiving high suction than those receiving low suction, and no ingrowth of granulation tissue was evident in any of the **catheters** at the time of their removal.

Clinical sequelae after variable pressure levels of wound drain...

15/3,K/60 (Item 8 from file: 442)

DIALOG(R) File 442: AMA Journals

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00031254

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In Favor of Intracranial Pressure Monitoring and Aggressive Therapy in Neurologic Practice (CONTROVERSIES IN NEUROLOGY)

ROPPER, ALLAN H.

Archives of Neurology

December, 1985; 42: 1194-1195

LINE COUNT: 00123 WORD COUNT: 01701

...minimizes iatrogenic errors.

The risks of ICP monitoring are low (almost nil if a ventricular catheter or subarachnoid screw is used for less than three days) and afterward are approximately 10...

...an adjunct to the examination, monitoring also gives an early warning of deterioration of the **pressure** -volume relationship that presages brain death. Used in this way, evacuation of **clots**, **removal** of infarcted brain tissue, or decompressive craniectomies (Ref. 16) will have generally favorable results if...

... usually judge the need for therapy from clinical signs and experience, but like a pulmonary **artery catheter** after a large myocardial infarction, an ICP monitor provides additional information that turns treatment from...

15/3,K/61 (Item 9 from file: 442)

DIALOG(R) File 442: AMA Journals

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00027848

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Venous Thrombosis as a Cause of Superior Vena Cava Syndrome; Rapid Response to Streptokinase (CLINICAL OBSERVATIONS)

KATZ, PHILIP O.; HACKSHAW, BARRY T.; BARISH, CHARLES F.; POWELL, BAYARD L.

Archives of Internal Medicine

May, 1983; 143: 1050-1052

LINE COUNT: 00125 WORD COUNT: 01735

... Venous thrombosis of the upper extremity (arms and shoulders) has been

associated with central venous **pressure** lines, Swan-ganz balloon-tipped **catheters** , hyperalimentation lines, peritoneovenous shunts, and transvenous pacemakers. (Ref. 1-3) Thrombosis is usually local and asymptomatic and responds to conservative management or **catheter removal**. Extensive **thrombosis**, resulting in the superior **vena cava** syndrome, (Ref. 2,3) is most likely to occur with long-term or multiple, indwelling **cannulas** such as permanent pacemakers and hyperalimentation **catheters**. The syndrome often results in symptoms of increased intracranial **pressure**, facial edema, and respiratory distress. Jeejeebhoy et al (Ref. 4) found a 5% incidence of...

...patients undergoing home hyperalimentation. (Ref. 4) Another group (Ref. 5) examined 200 patients with central **catheters** for parenteral nutrition and found eight with thrombosis of the superior **vena cava** and three with pulmonary emboli. Parish et al (Ref. 1) found thrombosis in six (7%) of 86 patients with confirmed superior **vena cava** syndrome.

Conventional therapy for this problem has been the administration of IV heparin. Heparin does...

15/3,K/62 (Item 10 from file: 442)

DIALOG(R) File 442: AMA Journals

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00027358

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Mixed Venous Oxygen Saturation; Its Role in the Assessment of the Critically Ill Patient (CRITICAL CARE MEDICINE)

KANDEL, GABOR

Archives of Internal Medicine

July, 1983; 143: 1400-1402

LINE COUNT: 00199 WORD COUNT: 02757

... in most clinical situations, sampling from the distal lumen of a properly placed pulmonary artery catheter is the most convenient method of obtaining a sample of mixed venous blood. Care must be taken, however, to ensure that the balloon is deflated and that the catheter is not "wedged" in a branch of the pulmonary artery . In the occluded position, the aspirated sample may contain a variable amount of fully oxygenated blood that has traversed pulmonary capillaries . (Ref. 11) Because the wedged catheter itself obstructs blood flow , there is a high ventilation-perfusion (V/Q) ratio in the pulmonary tissue at the... ...to withdraw blood slowly. (Ref. 14) Oxygenated blood may also be sampled from the pulmonary artery in patients with severe mitral regurgitation, (Ref. 15) but this condition can be anticipated when large v waves are observed in the capillary wedge pressure tracing.

THE OXYGEN TRANSPORT SYSTEM

To appreciate the clinical importance of SvO2, it is necessary...

15/3,K/63 (Item 11 from file: 442)

DIALOG(R) File 442:AMA Journals

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00025583

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Ischemic Forms of Acute Venous Thrombosis (REVIEW ARTICLE)

HIRSCHMANN, JAN V.

Archives of Dermatology

July, 1987; 123: 933-936

LINE COUNT: 00201 WORD COUNT: 02779

... of thrombectomy, performed with local or general anesthesia, employs an

incision into the common femoral vein and removal of proximal clot with a venous balloon catheter. (Ref. 40) During this stage, maintaining positive intrathoracic pressure minimizes the risk of pulmonary embolism. After removing the proximal clot, the surgeon expresses thrombi from the distal veins by manual compression, leg elevation, the winding of an elastic (Esmarch) bandage around the leg from the foot to the groin, and further use of balloon catheters. Intraoperative venography can assess the adequacy of the procedure. Thrombectomy, by removing the accessible clots, not only relieves the elevated venous pressure but also reduces the risk of pulmonary emboli and further extension of thrombosis. Following thrombectomy, some surgeons leave a catheter in the vein to allow high-dose regional anticoagulation with heparin; others construct a temporary arteriovenous fistula by connecting the proximal end of the long saphenous vein to the superficial femoral artery. This procedure allows high-velocity blood flow through the thrombectomized vein and decreases the frequency of postoperative reocclusion. The fistula is closed four to six weeks later, when the endothelium of the vein has presumably healed. (Ref. 39)

Thrombectomy reduces the long-term sequelae of iliofemoral thrombosis, including...

15/3,K/64 (Item 1 from file: 158)

DIALOG(R) File 158: DIOGENES(R)

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01245665 DIOGENES RECORD NUMBER: 1605421

MDR (MAUDE) REPORT: TARGET THERAPEUTICS/A BOSTON SCIENTIFIC CO. FASTRACKER-325 MODEL 550XXX - MALFUNCTION.

DEVICE CLASSIFICATION: THE DATA FOR THIS FIELD WAS DELETED BY FOI SERVICES DUE TO INCOMPLETE, ERRONEOUS OR UNVERIFIABLE DATA PROVIDED BY FDA.

COMPANY NAME: TARGET THERAPEUTICS/A BOSTON SCIENTIFIC CO , 47201 LAKEVIEW BLVD, FREMONT, CA 94538

ADVISORY COMMITTEE: THE DATA FOR THIS FIELD WAS DELETED BY FOI SERVICES DUE TO INCOMPLETE, ERRONEOUS OR UNVERIFIABLE DATA PROVIDED BY FDA SOURCE: FDA MDR LIST (MDR). LIST EDITION: JANUARY 1999 PUBLICATION DATE: September 15, 1997 (19970915)

- IT WAS REPORTED TO TARGET THAT DURING MANIPULATION OF A CATHETER, THE CATHETER KINKED. THE HOSP WAS CONTACTED FOR FURTHER INFO ON THIS PROCEDURE AND IT WAS REVEALED THAT THE PRODUCT COMPLAINT WAS FOR A CATHETER RUPTURE, NOT KINKING. BECAUSE OF THIS NEW INFO THE COMPLAINT WAS DETERMINED TO BE A...
- ... WAS NO IMPACT OR HARM TO THE PT FROM THE PRODUCT MALFUNCTION. THE FASTRACKER-325 **CATHETER** WAS RETURNED WRAPPED AROUND ITSELF IN A PLASTIC BAG. DURING THE INVESTIGATION IT WAS OBSERVED...
- ...MOST PROBABLE CAUSE FOR THE BALLOONING AND BURST OF THE SHAFT RELATES TO AN INFUSION **PRESSURE** IN EXCESS OF THE MAXIMUM RECOMMENDED, MOST LIKELY AS A RESULT OF THE BLOCKAGE OF THE **CATHETER**. PER LABELING INSTRUCTIONS: "CAUTION: CAREFULLY READ ALL INSTRUCTIONS PRIOR TO USE. OBSERVE ALL WARNINGS AND...
- ...TO PROCEDURE. FAILURE TO DO SO MAY RESULT IN COMPLICATIONS." "WARNING DO NOT EXCEED INFUSION PRESSURE INDICATED FOR EACH CATHETER MODEL (TABLE 3 BELOW). EXCESSIVE PRESSURES COULD DISLODGE A CLOT, PERFORATE THE VESSEL WALL, RUPTURE THE CATHETER, OR SEVER THE TIP." FROM TABLE 3, THE MAXIMUM INFUSION PRESSURE FOR THIS CATHETER IS 300 PSI. "WARNING: DISCONTINUE USE OF FASTRACKER FOR INFUSION IF INCREASED RESISTANCE IS NOTED. RESISTANCE INDICATES POSSIBLE BLOCKAGE. REMOVE AND REPLACE BLOCKED FASTRACKER CATHETER IMMEDIATELY. DO NOT ATTEMPT TO CLEAR BLOCKAGE BY OVER-PRESSURIZATION. DOING SO MAY CAUSE THE CATHETER TO RUPTURE, RESULTING IN VASCULAR DAMAGE OR PT INJURY." FOR THE SAKE OF THE ANALYSIS, THE CATHETER HUB WAS REMOVED: THE CATHETER WAS PROPERLY FLARED AND ADAPTED. DUE TO THE NATURE OF THE COMPLAINT, NO MORE EVAL...

15/3,K/65 (Item 2 from file: 158)

DIALOG(R) File 158: DIOGENES(R)

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01241382 DIOGENES RECORD NUMBER: 1601138

MDR (MAUDE) REPORT: QUINTON INSTRUMENT CO. ANGIO-SEAL MODEL NA - INJURY.

DEVICE CLASSIFICATION: THE DATA FOR THIS FIELD WAS DELETED BY FOI SERVICES DUE TO INCOMPLETE, ERRONEOUS OR UNVERIFIABLE DATA PROVIDED BY FDA.

COMPANY NAME: QUINTON INSTRUMENT CO., 3303 MONTE VILLA PKWY , BOTHELL, WA 98021

ADVISORY COMMITTEE: THE DATA FOR THIS FIELD WAS DELETED BY FOI SERVICES DUE TO INCOMPLETE, ERRONEOUS OR UNVERIFIABLE DATA PROVIDED BY FDA SOURCE: FDA MDR LIST (MDR). LIST EDITION: JANUARY 1999

PUBLICATION DATE: September 17, 1997 (19970917)

... A DIAGNOSTIC PROCEDURE, AN ANGIO-SEAL DEVICE WAS PLACED; HOWEVER, HEMOSTASIS WAS NOT ACHIEVED. MANUAL **PRESSURE** WAS HELD FOR A DURATION OF 20 MINS. THE PT COMPLAINED OF NUMBNESS IN HER LEG 40 MINS FOLLOWING THE APPLICATION OF **PRESSURE**, AND HER PEDAL PULSES WERE NOTED TO BE ABSENT. THE PHYSICIAN SENT THE PT TO...

...NOTED AROUND THE ANCHOR AND THE COLLAGEN WAS FOUND TO BE INTRA-ARTERIAL. A FOGERTY CATHETER WAS USED TO REMOVE THE THROMBUS. THE FOLLOWING DAY THE PT WAS DISCHARGED FROM THE HOSP WITH NO FURTHER SEQUELAE. THE ANGIO-SEAL INSTRUCTIONS FOR USE STATE THAT COLLAGEN DEPOSITION INTO THE ARTERY OF THROMBOSIS AT THE PUNCTURE SITE ARE POSSIBLE RISKS ASSOCIATED WITH USE OF THE ANGIO-SEAL DEVICE OR VASCULAR ACCESS PROCEDURES. THE IFUS INSTRUCT THAT IF THIS CONDITION IS SUSPECTED, THE DIAGNOSIS CAN BE...

15/3,K/66 (Item 3 from file: 158)

DIALOG(R) File 158: DIOGENES(R)

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01240601 DIOGENES RECORD NUMBER: 1600357

MDR (MAUDE) REPORT: TARGET THERAPEUTICS FAS TRACKER - 18 MODEL 134XXX - MALFUNCTION.

DEVICE CLASSIFICATION: (DQO) CATHETER, INTRAVASCULAR, DIAGNOSTIC. 870-1200. 870.1200.

COMPANY NAME: TARGET THERAPEUTICS, 47201 LAKEVIEW BLVD , FREMONT, CA 94537

ADVISORY COMMITTEE: CIRCULATORY SYSTEMS DEVICE PANEL DEVICE PANEL (DVCIRC)

SOURCE: FDA MDR LIST (MDR). LIST EDITION: JANUARY 1999 PUBLICATION DATE: April 7, 1997 (19970407)

... DIFFICULTY WAS EXPERIENCED DURING A PVA INJECTION. DURING THE INJECTION WITH A 3CC SYRINGE THE CATHETER SPLIT. THE CATHETER WAS REMOVED AND THERE WAS NO HARM TO THE PT. DURING THE INVESTIGATION IT WAS...

...END OF THE BALLOONED SEGMENT. THE SEVERITY OF THE FAILURE WAS CONSISTENT WITH AN INFUSION PRESSURE IN EXCESS OF THE MAXIMUM RECOMMENDED, MOST LIKELY WHILE THE FLOW IN THE CATHETER WAS RESTRICTED. PER PACKAGE INSERT: WARNING: DISCONTINUE USE OF CATHETER INFUSION IF INCREASED RESISTANCE IS NOTED. RESISTANCE INDICATES POSSIBLE BLOCKAGE. REMOVE AND REPLACE BLOCKED CATHETER IMMEDIATELY. DO NOT ATTEMPT TO CLEAR BLOCKAGE BY OVER-PRESSURIZATION. DOING SO MAY CAUSE THE CATHETER TO RUPTURE, RESULTING IN VASCULAR DAMAGE OR PT INJURY. FREQUENCY AND SEVERITY OF OCCURRENCE OF THIS EVENT ARE NOT ADDRESSED...

15/3,K/67 (Item 4 from file: 158)

DIALOG(R) File 158: DIOGENES(R)

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01240555 DIOGENES RECORD NUMBER: 1600311

MDR (MAUDE) REPORT: TARGET THERAPEUTICS FAS TRACKER-10 MODEL 135XXX - MALFUNCTION.

DEVICE CLASSIFICATION: (DQO) CATHETER, INTRAVASCULAR, DIAGNOSTIC. 870-1200. 870.1200.

COMPANY NAME: TARGET THERAPEUTICS, 47201 LAKEVIEW DR, FREMONT, CA 94538 ADVISORY COMMITTEE: CIRCULATORY SYSTEMS DEVICE PANEL DEVICE PANEL (DVCIRC)

SOURCE: FDA MDR LIST (MDR). LIST EDITION: JANUARY 1999 PUBLICATION DATE: November 22, 1996 (19961122)

DURING AN EMBOLIZATION OF A SPINAL T12 TUMOR WITH PVA, THE CATHETER BECAME OCCLUDED AND COULD NOT BE FLUSHED. A ONE CC SYRINGE WAS USED TO TRY TO CLEAR THE OCCLUSION AS THE PHYSICIAN FELT THE POSITIONING OF THE CATHETER WAS 'SAFE' IF RUPTURE OCCURRED. WHEN THE OCCLUSION WAS NOT CLEARED BY THE PRESSURE IT WAS REMOVED WITH DIFFICULTY THROUGH THE .35 INTERNAL LUMEN GUIDING CATHETER . DURING THE INVESTIGATION IT WAS OBSERVED THAT THE SHAFT WAS BALLOONED IN SEVERAL PLACES STARTING...

- ... RELEVANT TO PROCEDURE. FAILURE TO DO SO MAY RESULT IN COMPLICATIONS. WARNING: DISCONTINUE USE OF CATHETER TRACKER FOR INFUSION IF INCREASED RESISTANCE IS NOTED. RESISTANCE INDICATES POSSIBLE BLOCKAGE. REMOVE AND REPLACE BLOCKED FASTRACKER CATHETER IMMEDIATELY. DO NOT ATTEMPT TO CLEAR BLOCKAGE BY OVER-PRESSURIZATION. DOING SO MAY CAUSE THE CATHETER TO RUPTURE, RESULTING IN VASCULAR DAMAGE OR PT INJURY. THE CATHETER HUB WAS REMOVED TO EXPOSE THE PROXIMAL END AND SHOWED THE SHAFTS WERE NOT PROPERLY...
- ...AND FORM A PLEAT. THERE WAS A GAP BETWEEN THE LUER FITTING END AND THE CATHETER SHAFT. THE MOST PROBABLE CAUSE FOR THIS FAILURE COULD BE A COMBINATION OF ATTEMPTING TO...
- ... THE BLOCKAGE USING A 1CC SYRINGE AND THE IMPROPER GLUING, FLARING AND ADAPTION OF THE **CATHETER**. FREQUENCY AND SEVERITY OF OCCURRENCE OF THIS EVENT ARE NOT ADDRESSED IN THE DEVICE LABELING...

15/3,K/68 (Item 5 from file: 158)

DIALOG(R) File 158: DIOGENES(R)

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00835113 DIOGENES RECORD NUMBER: 1511746

MDR REPORT - FINAL: TARGET THERAPEUTICS, INC. TRACKER-18. MALFUNCTION.

DEVICE CLASSIFICATION: (DQO) CATHETER, INTRAVASCULAR, DIAGNOSTIC.

870-1200. 870.1200.

COMPANY NAME: TARGET THERAPEUTICS, INC (TARGTHER)

ADVISORY COMMITTEE: CIRCULATORY SYSTEMS DEVICE PANEL DEVICE PANEL (DVCIRC)

SOURCE: FDA MDR LIST (MDR). LIST EDITION: FEBRUARY 1997 PUBLICATION DATE: February 7, 1996 (19960207)

CATHETER STUCKED AND RETRACTING, IT FELL APART." MORE INFO WAS REQUESTED FROM THE DISTRIBUTOR. THE ADD'L INFO STATED: "DR WAS USING THE CATHETER FOR ANGIOGRAPHY AND AT THE BEGINNING OF THE PROCEDURE THE DEVICE FRACTURED. THERE WERE NO...

THAT THE SHAFT OF THE CATHETER HAD BALLOONED AND BURST AT THE DISTAL END.

DUE TO THE SEVERITY OF THE FAILURE, THE MOST PROBABLE CAUSE OF THIS FAILURE
OF THE POLYETHYLENE SHAFT RELATES TO AN INFUSION PRESSURE IN EXCESS OF
THE MAXIMUM RECOMMENDED. PER THE PACKAGE INSERT: TO INFUSE, COMPLETELY
REMOVE THE GUIDEWIRE FROM THE CATHETER, CONNECT 3 CC SYRINGE, AND INFUSE
AS REQUIRED. MONITOR INFUSION PRESSURES WITH A SYRINGE MANOMETER.
WARNING: DISCONTINUE USE OF CATHETER FOR INFUSION IF INCREASED RESISTANCE
IS NOTED. RESISTANCE INDICATES POSSIBLE BLOCKAGE. REMOVE AND REPLACE
BLOCKED CATHETER IMMEDIATELY. DO NOT ATTEMPT TO CLEAR BY
OVER-PRESSURIZATION. DOING SO MAY CAUSE THE CATHETER TO RUPTURE,
RESULTING IN VASCULAR DAMAGE OR PT INJURY." WITH THE EXCEPTION OF THE
ABOVE MENTIONED VISUAL ANOMALIES, THE RETURNED CATHETER MET DIMENSIONAL

REQUIRMENTS. THE COMPLAINT THAT THE CATHETER FRACTURED WAS CONFIRMED, ALTHOUGH A BETTER DESCRIPTION OF THE FAILURE WOULD BE BALLOONED AND BURST. THE MOST PROBABLE CAUSE FOR THIS ANOMALY COULD BE THE USE OF EXCESSIVE PRESSURE , MOST LIKELY WHILE THE FLOW IN THE CATHETER WAS RESTRICTED. THIS ISOLATED INCIDENT HAS BEEN DISCUSSED AT THE WEEKLY PRODUCT PERFORMANCE REVIEW BOARD...

15/3,K/69 (Item 6 from file: 158)

DIALOG(R) File 158: DIOGENES(R)

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00457515 DIOGENES RECORD NUMBER: 1358535

MDR REPORT - PRELIMINARY : TERUMO MEDICAL CORP.. RADIFOCUS GLIDE WIRE MODEL NA CATALOG RF*PA5153 SERIOUS INJURY

FDA NO.: M520908

DEVICE CLASSIFICATION: (DQX) Wire, Guide, Catheter. CLASS: 2. 870-1330. 870.1330.

COMPANY NAME: TERUMO MEDICAL CORP (TERUMEDI)

ADVISORY COMMITTEE: CIRCULATORY SYSTEMS DEVICE PANEL (DVCIRC).

SOURCE: FDA MDR LIST (MDR). LIST EDITION: OCTOBER 1995.

PUBLICATION DATE: June 2, 1994 (19940602)

TEXT:

... TOTAL OCCLUSION WAS MET WITH RESISTANCE. AFTER MUCH MANIPULATION, THE PHYSICIAN ATTEMPTED TO REMOVE THE WIRE . UPON REMOVAL FROM THE OCCLUDED ARTERY , 40-50 CM OF THE DISTAL END OF THE WIRE BROKE OFF IN THE PT'S LEFT EXTERNAL ILIAC ARTERY. RETRIEVAL ATTEMPTS WERE MADE WITH...

15/3,K/70 (Item 7 from file: 158)

DIALOG(R) File 158: DIOGENES(R)

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00267745 DIOGENES RECORD NUMBER: 1165078

MDR REPORT - FINAL : TARGET THERAPEUTICS, INC.. TRACKER 18 HIGH FLOW, UNIBODY MODEL NA CATALOG 132101 SERIOUS INJURY

FDA NO.: M277712

DEVICE CLASSIFICATION: (DQO) Catheter, Intravascular, Diagnostic. CLASS: 2. 870-1200. 870.1200.

COMPANY NAME: TARGET THERAPEUTICS, INC (TARGTHER)

ADVISORY COMMITTEE: CIRCULATORY SYSTEMS DEVICE PANEL (DVCIRC).

SOURCE: FDA MDR LIST (MDR). LIST EDITION: JANUARY 1994.

PUBLICATION DATE: April 9, 1992 (19920409)

TEXT:

DR USED. 016 AND. 014 GUIDEWIRES WITH THE DEVICE. THE CATHETER WAS NOT STEAM SHAPED AND CONTINUOUS FLUSHING WAS USED. THE DR WAS PERFORMING A PVA EMBOLIZATION IN THE MIDDLE CEREBRAL ARTERY. WHILE USING CONTRAST HE NOTED THAT THE CONTRAST WAS GETTING CAUGHT IN THE CATHETER. THE CATHETER WAS REMOVED, REVEALING EXPANSION OF TUBING AND THE DISTAL MARKER WAS MISSING. THE RETURNED SECTION...

... MENTIONED DEFECTS, RETURNED PORTION MEETS VISUAL AND DIMENSIONAL SPECS FOR THIS PRODUCT. A PARTIALLY OCCLUDED CATHETER WILL INCREASE THE INFUSION PRESSURE. PACKAGE INSERT WARNS: "INFUSION PRESSURE WITH THIS DEVICE SHOULD NOT EXCEED 100 PSI. PRESSURE IN EXCESS OF THE RECOMMENDED RANGE MAY RESULT IN CATHETER RUPTURE OR TIP SEVERANCE. IN THE EVENT THAT POLYVINYL ALCOHOL IS USED AND OCCLUSION OR FLOW RESISTANCE OCCURS, REMOVE AND REPLACE OCCLUDED CATHETER IMMEDIATELY. DO NOT ATTEMPT TO CLEAN AN OCCLUDED CATHETER BY OVER-PRESSURIZATION, FOR IT MAY CAUSE CATHETER RUPTURE RESULTING IN PT INJURY." THE CAUSE OF THIS EVENT HAS NOT BEEN DETERMINED. HOWEVER...

15/3,K/71 (Item 8 from file: 158)

DIALOG(R) File 158: DIOGENES(R)

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00183264 DIOGENES RECORD NUMBER: 1084918

MDR REPORT - FINAL : SCIMED LIFE SYSTEMS, INC.. SCIMED ACE CATHETER MODEL ACE 20/2.0 CATALOG 02071-01 SERIOUS INJURY

FDA NO.: M182693

DEVICE CLASSIFICATION: (LOX) PTCA Catheters & Accessories. CLASS: No

Class Provided by FDA. CFR Cite Not Provided by FDA. COMPANY NAME: SCIMED LIFE SYSTEMS, INC (SCIMLIFESYST)

ADVISORY COMMITTEE: CIRCULATORY SYSTEMS DEVICE PANEL (DVCIRC).

SOURCE: FDA MDR LIST (MDR). LIST EDITION: JUNE 1993.

PUBLICATION DATE: January 26, 1990 (19900126)

TEXT:

... INFLATIONS. DR EXPERIENCED DIFFICULTY IN REMOVING DEVICE. VESSEL OCCLUSION OCCURRED. PT WAS SENT TO CORONARY **ARTERY** BYPASS SURGERY. RECOMMENDED MAXIMUM INFLATION **PRESSURE** FOR THE DEVICE IS 8 ATM. **CATHETER** WAS NOT RETURNED FOR ANALYSIS. THE CAUSE OF THIS EVENT HAS NOT BEEN DETERMINED. HOWEVER...

15/3,K/72 (Item 1 from file: 187)

DIALOG(R) File 187: F-D-C Reports

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00244433 F-D-C Accession Number 01250120011

The Gray Sheet

March $2\overline{2}$, 1999

Volume 25, Issue 12

Possis' AngioJet Thrombectomy System Approved For Coronary Indications

... Possis Medical's AngioJet Thrombectomy System in the heart requires placement of a "temporary pacing catheter to support the patient through hemodynamically significant arrhythmias which may occur," according to a bolded...

...labeling for the new indication.

FDA cleared the expedited premarket approval application March 12 "for removing thrombus in the treatment of patients with symptomatic coronary artery or saphenous vein graft lesions in vessels greater-than-or-equal-to 2.0 mm in diameter prior...

...an advisory panel.

Angiojet has been available in the U.S. since 1997 for the **removal** of blood **clots** from grafts in kidney dialysis patients. The device received a CE mark for peripheral (leg...

... use pump set and the 1.75 mm AngioJet LF140 sterile, dual-lumen single-use ${\bf catheter}$, priced at \$1,450. The system uses high-speed saline jets to create a low-pressure zone at the ${\bf catheter}$ tip resulting in suction, break-up and ${\bf removal}$ of ${\bf thrombus}$ through the ${\bf exhaust}$ lumen of the ${\bf catheter}$.

Labeling cautions that AngioJet is contraindicated in patients in whom other intracoronary interventional procedures are contraindicated or in whom the lesion cannot be accessed with the guide wire .

 ${\tt FDA}$ approval was based on data from two multicenter trials that included a total of...

...near future.

"This marketing approval, together with the favorable cost saving profile of AngioJet System clot removal compared to the clot dissolving drug urokinase, will allow us to aggressively pursue all segments of the coronary blood clot removal market," Possis Medical President and CEO

'Robert Dutcher commented in a March 15 release.

In...

... looking to develop AngioJet for the treatment of stroke caused by clots in the carotid **artery** . A 10-patient study for the indication is currently under way, and one patient has...

... an estimated 80% of which are due to clots. The firm is developing a narrower **catheter** to be used with AngioJet on this indication and hopes to enroll patients for human...

15/3,K/73 (Item 2 from file: 187)

DIALOG(R) File 187:F-D-C Reports

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00244432 F-D-C Accession Number 01250120010 The Gray Sheet March 22, 1999 Volume 25, Issue 12

New CEO Tobin, Three Approvals Signal Smoother Times For Boston Scientific

... s Feb. 23 510(k) clearance of the Oasis thrombectomy system, which uses a low-pressure water jet to break up blood clots; it is indicated is for removal of clots in hemodialysis access grafts.

The approximately \$600 device is similar in approach to Possis Medical's AngioJet, just approved for removal of coronary artery clots (see related story, p.17). Boston Scientific says it is still exploring whether it will seek approval for other indications for the 6 Fr catheter -based system, which is powered by standard cath lab angiographic injectors and operates at much lower pressure. AngioJet requires a separate, \$25,000 drive unit, while its single-use catheter costs \$1,450. Boston conducted a 122-patient, nine-center trial to support approval of Oasis.

On March 17 came the announcement of FDA market clearance of the Constellation mapping **catheter** for complex right atrial tachycardias. The basket **catheter**, CE marked and approved for use in Japan since 1997, will be marketed by the...

15/3,K/74 (Item 3 from file: 187)

DIALOG(R) File 187:F-D-C Reports

(c) 1999 F-D-C Reports Inc. All rts. reserv.

00239399 F-D-C Accession Number 01250030009 The Gray Sheet January 18, 1999 Volume 25, Issue 3

Possis Cerebrovascular Stroke Device Alternative To Be Used With AngioJet

Possis Medical is developing a neurovascular **catheter** for use in conjunction with the AngioJet Rheolytic thrombectomy system to treat the most prevalent form of stroke by **removing** blood **clots** from the cerebrovascular **arteries**, the company says.

Once development of the **catheter** is complete, the company plans to seek an investigational device exemption to conduct a study...

 \dots disposable, single-use pulsatile pump set that pressurizes and delivers the sterile saline into the **catheter** . The drive unit controls the flow of saline solution through the **catheter** .

To remove a clot , a guidewire is advanced to the site of the coagulum, and a catheter is introduced. The AngioJet system pumps saline solution through the catheter at high pressure until it reaches the tip, where it is forced at high velocity through small openings.

Microjets of water are formed at the **catheter** tip and serve to break up the clot and create a low-**pressure** region that draws the clot into the **catheter**. The dissolved material is removed from the body and placed into a collection bag. The procedure can be performed in five to ten minutes, the company claims.

Using an existing **catheter**, the LF 140, Possis already has begun evaluating the AngioJet Rheolytic system in treatment of strokes caused by clots in carotid **arteries**. A smaller, more flexible **catheter** is necessary for use of the AngioJet in cerebrovascular stroke applications, the company explains.

The...

... enrolled the first subject in a 10-patient feasibility study of the system in carotid **arteries**, Possis reported in a Jan. 14 release. Because the patient population for carotid stroke is...

the patient population for carotid stroke is...
...year, the company estimates. Of these, 70,000 are caused by clots in the carotid artery. Despite the relatively small market potential for the carotid indication, Possis says it undertook the carotid trial in an effort to raise awareness of the clinical utility of using catheters and thrombectomy devices for treatment of stroke.

The neurovascular catheter would allow Possis to gain access to the cerebrovascular stroke market and offer patients an...

... the first six hours following a stroke, use of the AngioJet with the newly designed **catheter** opens up the treatment window to the full nine hours, Possis maintains. Since a large...

...impact patient care.

Possis is pricing the AngioJet drive unit at \$25,000 and its **catheters** in the \$600-1,400 range. AngioJet is distributed directly in the U.S. and internationally through independent distributors. If approved, the **catheter** developed for cerebrovascular applications and AngioJet system would be marketed to interventional neuroradiologists.

AngioJet initially was cleared in December 1996 for treatment of dialysis access graft thrombosis using an earlier **catheter** model ("The Gray Sheet" Dec. 9, 1996, I&W-14). The device received a CE...

... has submitted a PMA for use of the AngioJet in conjunction with the LF 140 catheter for removal of blood clots from the coronary arteries .

Possis announced in November that FDA had granted the application for coronary use expedited review...

15/3,K/75 (Item 4 from file: 187)
DIALOG(R)File 187:F-D-C Reports
(c) 1999 F-D-C Reports Inc. All rts. reserv.

00232321 F-D-C Accession Number 01240460002 The Gray Sheet November 16, 1998 Volume 24, Issue 46

AngioJet Reduces Complications, Coronary Events Compared To Urokinase

Possis Medical's AngioJet LF140 rheolytic thrombectomy catheter can significantly reduce in-hospital major cardiac events, bleeding

complications and **vascular** complications in patients with intracoronary thrombus as compared to intracoronary urokinase infusion, Stephen Ramee, MD ...

... diameter greater than 2 mm, and angiographic evidence of thrombosis. Target vessels were 54% saphenous **vein** grafts, and all were an average diameter of 3.3-3.45 mm.

Secondary endpoints...

... major adverse cardiac events and that bleeding complications were reduced by half. Similarly, Ramee reported, **vascular** complications in the AngioJet arm were reduced by "a factor of four."

While Ramee viewed...

... the conference will be used to support Possis' pending premarket approval application for the LF140 catheter, which FDA accepted Sept. 14.

The primary endpoint for the equivalency trial looked at "failure...

...67%).

Ramee also observed that the use of the AngioJet allowed for a more rapid removal of thrombus and stenting as opposed to the 6-30 hours of treatment with urokinase. Compared to...

... AngioJet would result in a shortened hospital stay.

The tip of the 5 Fr. LF140 **catheter** resembles a showerhead that shoots three high-speed jets of saline back through the **catheter**. The mechanical action creates a low-**pressure** area surrounding the 0.5 mm space between the tip and the effluent lumen drawing...

... have been enrolled to date. The registry will be used to test a newer AngioJet catheter , the TF140. Similar to LF140, the TF140 has a tipped flexible nosecone which allows the catheter to be more "nimble" and to be guided through more tortuous veins, the company says.

15/3,K/76 (Item 5 from file: 187)
DIALOG(R)File 187:F-D-C Reports

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00146075 F-D-C Accession Number 01220120040 The Gray Sheet March 18, 1996 Volume 22, Issue 12

In Brief: Possis Medical

... to FDA seeking clearance to market its AngioJet Rapid Thrombectomy System for peripheral use including removal of clots from leg and arm arteries and bypass grafts. Possis also files an investigational device exemption application to commence Phase II coronary trials of the catheter -based system, which delivers pressurized saline jets to remove blood clots in arteries. If approved by FDA, the randomized Phase II coronary trial will enroll up to 500...

15/3,K/77 (Item 6 from file: 187)

DIALOG(R) File 187: F-D-C Reports

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00082673 F-D-C Accession Number 01180380034 The Gray Sheet

September 21, 1992 Volume 18, Issue 38

In Brief: Possis Medical

... for clinical studies of its Angiojet water-propelled thrombectomy system, a percutaneous device designed to **remove** blood **clots** in peripheral **arteries** and **vascular** grafts. The Angiojet system, which consists of a non-disposable drive console, a disposable **catheter**, a high-**pressure** pump, and accessories, was developed, in part, under a December 1990 pact with Scimed ("The...

15/3,K/78 (Item 1 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)
(c) 1999 ECRI-nonprft agncy. All rts. reserv.

00682646 ABS-32215 SUBFILE: ABS PRODUCT(s): 10-582 CANNULAE, VENOUS

SOURCE: Rodriguez RA, Cornel G, Semelhago L, et al. Cerebral effects in superior vena caval cannula obstruction: the role of brain monitoring. "Ann Thorac Surg" 1997 Dec;64(6):1820-2.

... girl undergoing surgical closure of a secundum atrial septal defect experienced obstruction of the superior **vena cava** (SVC) by a venous **cannula** . A 14 Fr Stockert venous **cannula** was inserted into the SVC, resulting in immediate absence of diastolic flow in the right middle cerebral **artery** . This was detected by transcranial Doppler echography. The mean cerebral blood flow velocities decreased by...

... period of 50% reduction of regional cerebral venous O<subscript 2> saturation. The central venous **pressure** increased from 6 to 45 mm Hg in 1 min after insertion of the venous **cannula**. There was also detection of electroencephalographic slowing. After these signs were detected, the venous **cannula** was repositioned, and the abnormalities were rectified. The patient suffered no neurologic complications. The authors conclude that, if the venous **cannula** is repositioned promptly after indications of physiologic abnormality, the **obstruction** will be **removed**.

15/3,K/79 (Item 2 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)
(c) 1999 ECRI-nonprft agncy. All rts. reserv.

00673049 MDR-871995 SUBFILE: MDR PRODUCT(s): 10-688 CATHETERS, ANGIOGRAPHY

SOURCE: M.D.R. REPORT DATED 3/20/96.

THE PHYSICIAN INFUSED CONTRAST WITH AN INJECTOR AT THE PRESSURE OF 300 PSI IN THE PROCEDURE. AFTER HE TOOK ANGIOGRAMS SEVERAL TIMES, HE INFUSED AGAIN THE SAME WAY. THEN THE PROXIMAL PART OF THE CATHETER BURST." DEVICE WAS RETURNED AND CO TECH ANALYZED DEVICE FOR FAILURE MODE. DURING ANALYSIS IT...

CONSISTENT WITH A PRESSURE IN EXCESS OF THE MAXIMUM RECOMMENDED, WHICH MOST LIKELY WAS THE RESULT OF INFUSING WITH AN INJECTOR WHILE THE FLOW IN CATHETER WAS RESTRICTED DUE TO CONTRAST CRYSTAL FORMATION. THE PACKAGE INSERT RECOMMENDS: TO INFUSE, COMPLETELY REMOVE GUIDEWIRE FROM DEVICE, CONNECT 3 CC SYRINGE, AND INFUSE AS REQUIRED. MONITOR INFUSION PRESSURES WITH A SYRINGE MANOMETER DEVICE WHENEVER PRACTICAL. "WARNING: DISCONTINUE USE OF DEVICE FOR INFUSION IF INCREASED RESISTANCE IS NOTED. RESISTANCE INDICATES POSSIBLE BLOCKAGE. REMOVE AND REPLACE BLOCKED DEVICE CATHETER IMMEDIATELY. DO NOT ATTEMPT TO CLEAR BLOCKAGE BY OVERPRESSURIZATION. DOING SO MAY CAUSE CATHETER TO RUPTURE, RESULTING IN

VASCULAR DAMAGE OR PT INJURY. DO NOT EXCEED INFUSION PRESSURE INDICATED FOR EACH CATHETER. EXCESSIVE PRESSURE COULD DISLODGE A CLOT, PERFORATE VESSEL WALL, RUPTURE CATHETER, OR SEVERE THE TIP." FROM TABLE 3, THE MAXIMUM INFUSION PRESSURE FOR THIS CATHETER IS 300 PSI. OF THOSE DIMENSIONS THAT COULD BE MEASURED, RETURNED CATHETER MET CO'S REQUIREMENTS. THE MOST PROBABLE CAUSE FOR FAILURE OF DEVICE COULD BE EXCESSIVE INFUSION PRESSURE, MOST LIKELY AS A RESULT OF INFUSING WITH AN INJECTOR WHILE FLOW IN THE CATHETER WAS RESTRICTED DUE TO CONTRAST CRYSTAL FORMATION. THIS ISOLATED INCIDENT HAS BEEN DISCUSSED AT CO...

15/3,K/80 (Item 3 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)
(c) 1999 ECRI-nonprft agncy. All rts. reserv.

00658445 MDR-864031 SUBFILE: MDR PRODUCT(s): 10-714 CATHETERS, EMBOLECTOMY

SOURCE: M.D.R. REPORT DATED 2/07/96.

CATHETER STUCKED AND RETRACTING, IT FELL APART." MORE INFO WAS REQUESTED FROM THE DISTRIBUTOR. THE ADD'L INFO STATED: "DR WAS USING THE CATHETER FOR ANGIOGRAPHY AND AT THE BEGINNING OF THE PROCEDURE THE DEVICE FRACTURED. THERE WERE NO...

...COMPLETED THE FAILURE ANALYSIS. DURING THE INVESTIGATION IT WAS OBSERVED THAT THE SHAFT OF THE CATHETER HAD BALLOONED AND BURST AT THE DISTAL END. DUE TO THE SEVERITY OF THE FAILURE, THE MOST PROBABLE CAUSE OF THIS FAILURE OF THE POLYETHYLENE SHAFT RELATES TO AN INFUSION PRESSURE IN EXCESS OF THE MAXIMUM RECOMMENDED. PER THE PACKAGE INSERT: TO INFUSE, COMPLETELY REMOVE THE GUIDEWIRE FROM THE CATHETER , CONNECT 3 CC SYRINGE, AND INFUSE AS REQUIRED. MONITOR INFUSION PRESSURES WITH A SYRINGE MANOMETER. WARNING: DISCONTINUE USE OF CATHETER FOR INFUSION IF INCREASED RESISTANCE IS NOTED. RESISTANCE INDICATES POSSIBLE BLOCKAGE. REMOVE AND REPLACE BLOCKED CATHETER IMMEDIATELY. DO NOT ATTEMPT TO CLEAR BY OVER-PRESSURIZATION. DOING SO MAY CAUSE THE CATHETER TO RUPTURE, OVER-PRESSURIZATION. DOING SO MAY CAUSE THE CATHETER RESULTING IN VASCULAR DAMAGE OR PT INJURY." WITH THE EXCEPTION OF THE ABOVE MENTIONED VISUAL ANOMALIES, THE RETURNED CATHETER MET DIMENSIONAL REQUIRMENTS. THE COMPLAINT THAT THE CATHETER FRACTURED WAS CONFIRMED, ALTHOUGH A BETTER DESCRIPTION OF THE FAILURE WOULD BE BALLOONED AND BURST. THE MOST PROBABLE CAUSE FOR THIS ANOMALY COULD BE THE USE OF EXCESSIVE , MOST LIKELY WHILE THE FLOW IN THE CATHETER WAS RESTRICTED. THIS ISOLATED INCIDENT HAS BEEN DISCUSSED AT THE WEEKLY PRODUCT PERFORMANCE REVIEW BOARD...

15/3,K/81 (Item 4 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)
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00636598 ABS-30496 SUBFILE: ABS PRODUCT(s): 10-714 CATHETERS, EMBOLECTOMY

SOURCE: Gronert GA. Aspiration of venous air embolism {letter}. "Acta Anaesthesiol Scand" 1997 Jan; 41(1 Pt 1):89.

... if air fluid levels block blood flow. The author concludes that perhaps the turbulence of **flow** in the area of the superior **vena** cava and right atrium creates enough swirling or air bubbles to permit aspiration by a catheter .

15/3,K/82 (Item 5 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)
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00432167 MDR-520908 SUBFILE: MDR PRODUCT(s): 11-925 GUIDE WIRES

SOURCE: M.D.R. REPORT DATED 6/02/94.

... TOTAL OCCLUSION WAS MET WITH RESISTANCE. AFTER MUCH MANIPULATION, THE PHYSICIAN ATTEMPTED TO REMOVE THE WIRE . UPON REMOVAL FROM THE OCCLUDED ARTERY , 40-50 CM OF THE DISTAL END OF THE WIRE BROKE OFF IN THE PT'S LEFT EXTERNAL ILIAC ARTERY. RETRIEVAL ATTEMPTS WERE MADE WITH...

15/3,K/83 (Item 6 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)
(c) 1999 ECRI-nonprft agncy. All rts. reserv.

00284021 MDR-351076 SUBFILE: MDR PRODUCT(s): 16-854 INJECTION/INFUSION PORTS, IMPLANTABLE

SOURCE: M.D.R. REPORT DATED 11/24/92.

... REMOVED AT 10 DAYS POST IMPLANT. SITE CULTURES WERE NEGATIVE. DR'S DIAGNOSIS WAS DEEP VEIN THROMBOSIS WITH ACUTE THROMBOPHLEBITIS. DR ALSO STATES PT HAS A HYPERCOAGULABLE STATE AND IS OF OPINION DEVICE BECAME OCCLUDED BY THE THROMBOSIS. AFTER REMOVAL THE RESERVOIR WAS FLUSHED WITH HEPARINIZED SALINE SOLUTION AND SEEMED TO BE TOTALLY OCCLUDED. IT WAS NOTED TO HAVE A LEAK AT THE ACCESS NEEDLE INSERTION SITE. THE CATHETER WAS DISCONNECTED FROM THE RESERVOIR AND DEVICE SEEMED TO MAINTAIN ITS OCCLUDED CONDITION. PT WAS...

...CO'S LAB, THE DEVICE WAS VISUALLY INSPECTED. A 23 CM LONG SEGMENT OF THE CATHETER WAS INCLUDED. THE CONNECTOR TUBE APERTURE WAS FOUND TO BE UNOBSTRUCTED. THERE WERE FIVE NEEDLE PENETRATION MARKS IN THE SEPTUM...

... TO BE THE RESULT OF MULTIPLE PENETRATIONS AT EXACTLY THE SAME LOCATION. THE PORT WAS **PRESSURIZED** TO 100 LBS PER SQUARE INCH. NO LEAKS WERE NOTED. CONCLUSION: THE RETURNED PORT WAS...

15/3,K/84 (Item 7 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)
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00205715 MDR-277712 SUBFILE: MDR PRODUCT(s): 10-729 CATHETERS, CENTRAL VENOUS

SOURCE: M.D.R. REPORT DATED 4/09/92.

DR USED .016 AND .014 GUIDEWIRES WITH THE DEVICE. THE CATHETER WAS NOT STEAM SHAPED AND CONTINUOUS FLUSHING WAS USED. THE DR WAS PERFORMING A PVA EMBOLIZATION IN THE MIDDLE CEREBRAL ARTERY. WHILE USING CONTRAST HE NOTED THAT THE CONTRAST WAS GETTING CAUGHT IN THE CATHETER. THE CATHETER WAS REMOVED, REVEALING EXPANSION OF TUBING AND THE DISTAL MARKER WAS MISSING. THE RETURNED SECTION...

... MENTIONED DEFECTS, RETURNED PORTION MEETS VISUAL AND DIMENSIONAL SPECS FOR THIS PRODUCT. A PARTIALLY OCCLUDED CATHETER WILL INCREASE THE INFUSION PRESSURE. PACKAGE INSERT WARNS: "INFUSION PRESSURE WITH THIS DEVICE SHOULD NOT EXCEED 100 PSI. PRESSURE IN EXCESS OF THE RECOMMENDED RANGE MAY RESULT IN CATHETER RUPTURE OR TIP SEVERANCE. IN THE EVENT THAT POLYVINYL ALCOHOL IS USED AND OCCLUSION OR FLOW RESISTANCE OCCURS, REMOVE AND REPLACE OCCLUDED CATHETER IMMEDIATELY. DO NOT ATTEMPT TO CLEAN AN OCCLUDED CATHETER BY OVER-PRESSURIZATION, FOR IT MAY CAUSE CATHETER RUPTURE RESULTING IN PT INJURY."

15/3,K/85 (Item 8 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)
(c) 1999 ECRI-nonprft agncy. All rts. reserv.

00168204 ABS-19439 SUBFILE: ABS

PRODUCT(s): 10-729 CATHETERS, CENTRAL VENOUS

SOURCE: Turnage WS, Harper JV. Venous air embolism occurring after removal of a central venous catheter. "Anesth Analq" 1991 Apr; 72(4):559-60.

The authors describe 2 cases of air embolism after removal of central lines. In both cases, the patients experienced dizziness within 15 minutes of central venous catheter removal, which suggests that the cause of both episodes was the entrainment of air through the tract formed by the device. Both patients had a catheter in place long enough for a fibrinous tract to form that could remain open after the catheter 's removal. Also, maneuvers such as coughing or straining that would increase the venous pressure immediately after the removal of a catheter might dislodge a freshly formed clot, allowing the tract to reopen on the vascular side. The authors stress the importance of taking measures to prevent air embolism during catheter removal. At the authors' institution, central lines are removed with the patient in the supine position...

15/3,K/86 (Item 9 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)
(c) 1999 ECRI-nonprft agncy. All rts. reserv.

00133642 MDR-182693 SUBFILE: MDR PRODUCT(s): 17-184 CATHETERS, ANGIOPLASTY, BALLOON DILATATION

SOURCE: M.D.R. REPORT DATED 1/26/90.

BALLOON BURST AT 14 ATM AFTER MULTITUDE INFLATIONS. DR EXPERIENCED DIFFICULTY IN REMOVING DEVICE. VESSEL OCCLUSION OCCURRED. PT WAS SENT TO CORONARY ARTERY BYPASS SURGERY. RECOMMENDED MAXIMUM INFLATION PRESSURE FOR THE DEVICE IS 8 ATM. CATHETER WAS NOT RETURNED FOR ANALYSIS.

15/3,K/87 (Item 10 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)
(c) 1999 ECRI-nonprft agncy. All rts. reserv.

00093200 ABS-14286 SUBFILE: ABS

PRODUCT(s): 15-640 PRESSURE MONITORING TUBING SETS

10-729 Catheters, Central Venous 15-293 Domes, Pressure Transducer

SOURCE: Gibbs NC, Gardner RM. Dynamics of invasive pressure monitoring systems: Clinical and laboratory evaluation. Heart Lung 1988; 17(1):43-51.

7 pressure monitoring systems were evaluated in the clinical and laboratory settings to determine their ability to record invasive blood pressures. A large number of systems used in the clinical setting gave erroneous pressure results due to inadequate dynamic response. This was attributed mostly to air bubbles in the monitoring systems, located near the transducer. Simple catheter transducer system setups demonstrated better results, suggesting that simple "kits" should be used. Careful assembly...

... tubing was detrimental to the dynamic response of all systems, especially in those using pulmonary artery catheters. The authors state that fast-flush testing of pressure monitoring systems is necessary to ensure adequate clinical dynamic response characteristics. If the fast-flush characteristics are inadequate, the authors suggest that physicians and nurses troubleshoot the system and remove air bubbles and excessive tubing and check transducer domes for proper attachment.

15/3,K/88 (Item 11 from file: 198)
DIALOG(R)File 198:Health Devices Alerts(R)

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00005697 ABS-03711 SUBFILE: ABS PRODUCT(s): 10-759 CATHETERS, UMBILICAL

SOURCE: Henry CG, Gutierrez F, Lee JT, et al. Aortic thrombosis presenting as congestive heart failure: An umbilical artery catheter complication. "J Pediatr" 98:820-822; 1981 May.

... developed congestive heart failure resulting from completely occlusive aortic thrombi after removal of an umbilical artery catheter. Aortic arteriotomy and removal of thrombus were necessary to establish distal perfusion, but both patients died postoperatively as a result of complications.

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?show files;ds
File 351: DERWENT WPI 1963-1999/UD=9923; UP=9923; UM=9923
         (c) 1999 Derwent Info Ltd
File 344: Chinese Patents ABS Apr 1985-1999/Jun
         (c) 1999 European Patent Office
File 347: JAPIO Oct 1976-1999/Feb. (UPDATED 990603)
         (c) 1999 JPO & JAPIO
Set
        Items
                Description
                OCCCLUSION? ? OR BLOCKAGE? ? OR CLOSURE? ? OR OCCLUDED OR -
S1
       772092
             CLOSED OR BLOCKED OR CLOT? OR AIR()BUBBLE? ? OR EMBOLISM? ? OR
              THROMBO()EMBOLISM? ? OR THROMBOEMBOLISM? ? OR THROMBOSIS OR -
             THROMBUS OR OBSTRUCT?
S2
       775996
                S1 OR OCCLUSION? ?
                BLOOD(2N) VESSEL? ? OR ARTERY OR ARTERIES OR CAPILLAR? OR V-
S3
        51553
             EIN OR AORTA OR VENA() CAVA OR ARTERIA OR VENA OR ARTHEROSCLER-
             OSIS
S4
      1213270
                PRESSURE? ? OR PRESSURI?ED OR PSI OR POUNDS()PER()SOUARE()-
             INCH
S5
      1221271
                CATHETER? ? OR TUBE? ? OR CANNULA? ? OR PIPE? ? OR SIPHON?
             OR SYPHON? OR VENTURI
          793
S6
                S2 AND S3 AND S4 AND S5
S7
          185
                S2(10N)S3(10N)S4(10N)S5
S8
         7492
                S2(2N) (REMOV? OR ASPIRAT? OR TAKE?() AWAY OR EXCIS? OR SUCK-
              ()OUT)
S9
           11
                S3(S)S4(S)S5(S)S8
S10
           16
                S3(S)S4(S)S8
S11
           71
                S3(S)S5(S)S8
S12
           16
                S9:S10
S13
           67
                S11 AND IC=(A61B \text{ OR } A61H \text{ OR } A61M)
S14
                 (S12 OR S13) AND PN=(US 4964409 OR US 5059178 OR US 5681336
              OR WO 9509024 OR WO 9601079)
                PN=(US 4964409 OR US 5059178 OR US 5681336 OR WO 9509024 OR
S15
              WO 9601079)
S16
         1121
                 (EXTRACT? OR ERADICAT? OR CUT()OUT)(3N)(OCCLUSIVE OR S2)
S17
            8
                S16(S)(S3 OR VASCULAR)
S18
            0
                S17 AND S15
S19
            1
                S16 AND S15
                S16 AND (S3 OR VASCULAR)
S20
           16
S21
            1
                S20 AND S15
S22
           14
                S20 NOT (S12:S13)
```

?

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(Item 1 from file: 351)
 22/4/1
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
IM- *Image available*
AA- 98-581211/199849|
XR- <XRPX> N98-452709|
TI- Instrument for extracting blood clots from carotid artery
    comprises catheter with balloon tip linked to fluid source for
    expanding it to draw out clot|
PA- KOSHELEV YU M (KOSH-I) |
AU- <INVENTORS> KOSHELEV YU M; MAKHMUROV E G; SHESTOPEROV V E|
NC- 0011
NP- 001|
PN- RU 2110226 C1 19980510 RU 97103035 A 19970228 A61B-017/32
                                                                   199849 B
AN- <LOCAL> RU 97103035 A 199702281
AN- <PR> RU 97103035 A 19970228|
LA- RU 2110226(3)|
AB- <BASIC> RU 2110226 C
        The instrument consists of a flexible elastic catheter (1),
    enclosed in a sleeve (4) with a spiral (3) and equipped with a balloon
    tip (2). The balloon can be expanded by means of fluid, e.g. a
    physiological liquid, passed through the catheter.
        The instrument is used by inserting it through an incision in the
    patient's neck which cuts through the carotid artery blocked by a
    clot. By rotating the catheter it can be inserted to a length of 150
    mm, i.e. taking its balloon tip beynd the clot. The balloon is then
    inflated to trap the clot, allowing it to be drawn out through the
    incision in the neck.
        ADVANTAGE - The flexible nature of the instrument allows it to be
    inserted into the carotid artery and the clot withdrawn without
    damaging the artery .
        Dwg.1/1|
DE- <TITLE TERMS> INSTRUMENT; EXTRACT; BLOOD; CLOT; CAROTID; ARTERY;
    COMPRISE; CATHETER; BALLOON; TIP; LINK; FLUID; SOURCE; EXPAND; DRAW;
    CLOTI
DC- P31; P34|
IC- <MAIN> A61B-017/32|
IC- <ADDITIONAL> A61M-025/00|
FS- EngPI||
            (Item 2 from file: 351)
 22/4/2
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
IM- *Image available*
AA- 98-581210/199849|
XR- <XRPX> N98-452708|
TI- Endarterectomy instrument - has rod equipped with at least one flexible
    element with lengthwise rigidity, and one or more spiral working
    elements.
PA- KOSHELEV YU M (KOSH-I) |
AU- <INVENTORS> KOSHELEV YU M; MAKHMUROV E G; SHESTOPEROV V E|
NC- 001|
NP- 0011
PN- RU 2110225 C1 19980510 RU 97102290 A 19970214 A61B-017/32
                                                                    199849 B
AN- <LOCAL> RU 97102290 A 19970214|
AN- <PR> RU 97102290 A 19970214|
LA- RU 2110225(4)|
AB- <BASIC> RU 2110225 C
        The instrument consists of a rod (1) with a handle (2) on one end
    and a working element such as a scraper (7) on the other. The rod is
    also equipped with at least one flexible element (3) with lengthwise
```

rigidity, and the working element has at least one spiral (6) between it and the rod.

The flexible element can be made in the form of recesses in the rod, covered by a spring inside a protective casing, and the working element can be connected to the rod end by up to three spirals, while the scraper comprises a rectangular plate with rounded edges. The instrument is used by inserting it through an incision in the wall of an artery and rotating it clockwise by the handle until the tip reaches the point of the occlusion and allows the blockage to be extracted .

ADVANTAGE - Allows for effective and rapid removal of bodies of organic origin, such as plaque or calculi, from hollow vessels.

Dwg.1/2|

DE- <TITLE TERMS> INSTRUMENT; ROD; EQUIP; ONE; FLEXIBLE; ELEMENT; LENGTHWISE; RIGID; ONE; MORE; SPIRAL; WORK; ELEMENT|

DC- P311

IC- <MAIN> A61B-017/32|

FS- EngPI||

22/4/3 (Item 3 from file: 351)

DIALOG(R) File 351: DERWENT WPI (c) 1999 Derwent Info Ltd. All rts. reserv.

IM- *Image available*
AA- 98-557256/199847|

XR- <XRPX> N98-434381|

TI- Percutaneous aspiration catheter system used to break up and extract blood clots from blood vessels - has barbs positioned near distal end to trap material within catheter, barbs being integrally formed with ring mounted within lumen!

PA- SCIMED LIFE SYSTEMS INC (SCIM-N)|

AU- <INVENTORS> GORDON L S|

NC- 019|

NP- 001|

PN- WO 9844982 A1 19981015 WO 98US5411 A 19980319 A61M-029/00 199847 B

AN- <LOCAL> WO 98US5411 A 19980319|

AN- <PR> US 97822364 A 19970320|

FD- WO 9844982 A1

<DS> (National): CA JP

<DS> (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE|

LA- WO 9844982(E<PG> 41)|

DS- <NATIONAL> CA JP|

DS- <REGIONAL> AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE|

AB- <BASIC> WO 9844982 A

The percutaneous aspiration catheter (18) comprises a catheter having a proximal end, a distal end, and a lumen passing through it. A number of barbs are mounted within the distal end of the catheter lumen. The barbs are integrally formed with a ring mounted within the lumen of the catheter near the distal end.

The ring is made of a radio opaque material and describes a circular shape with a reverse bend suitable for forming a channel to act as guide wire retainer. Portions of the catheter may be coating with an anti-thrombogenic coating. The distal end of the catheter is coated with a lubricious coating.

USE - For breaking up and **extracting clots** or thrombi which may form within a coronary **artery** .

ADVANTAGE - Is more effective in sweeping **arteries** , and removing emboli that are free floating or not perfectly positioned. Minimises fragmentation of clots.

Dwg.4/14|

DE- <TITLE TERMS> PERCUTANEOUS; ASPIRATE; CATHETER; SYSTEM; BREAK; UP; EXTRACT; BLOOD; CLOT; BLOOD; VESSEL; BARBED; POSITION; DISTAL; END; TRAP; MATERIAL; CATHETER; BARBED; INTEGRAL; FORMING; RING; MOUNT; LUMEN

```
IC- <MAIN> A61M-029/00|
FS- EngPI||
 22/4/4
            (Item 4 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
IM- *Image available*
AA- 98-468842/199841|
XR- <XRAM> C98-142129|
XR- <XRPX> N98-365496|
TI- Tube extractor for extracting foreign bodies from locations such as
   arteries , veins, small intestine, respiratory or alimentary tract, and
    the like - has telescopic inner and outer tubes with an inflatable tube
    dilated by a hand pump!
PA- JELINEK M (JELI-I) |
NC- 0011
NP- 001|
PN- DE 29810598 U1 19980903 DE 98U2010598 U 19980612 A61B-017/50
AN- <LOCAL> DE 98U2010598 U 19980612|
AN- <PR> DE 98U2010598 U 19980612|
LA- DE 29810598(8)|
AB- <BASIC> DE 29810598 U
        The tube extractor, for the removal of foreign bodies from deep or
    inaccessible body cavities, has at least two flexible tubes (2,3) which
    are telescopic within each other, and an expandable tube (1) which can
    be dilated through a gas or fluid, and its far end is secured at the
    inner tube (2). The near end is bonded to the outer tube (3). A sliding
    seal is at the near end of the assembly, between the tubes (2,3). The
    free end of the inner tube (2) or the outer tube (3) has a connection
    for a hand pump (5) for a gas or fluid, and it has at least one opening
    (6) at the far end for the fluid/gas to enter the inflatable tube (1).
    The inner tube (2) can be a closed solid body. The extractor
    instrument is at least partially of latex or plastics, or polyurethane,
    silicon, rubber or polyvinyl chloride (PVC).
        USE - The instrument is for extracting foreign bodies from
    locations such as arteries , veins, the small intestine, the
    respiratory or alimentary tract, and the like.
        ADVANTAGE - The instrument gives an effective extraction, without
    damage, using hydraulic or pneumatic means.
        Dwg.1/4|
DE- <TITLE TERMS> TUBE; EXTRACT; EXTRACT; FOREIGN; BODY; LOCATE; ARTERY;
   VEIN ; INTESTINAL; RESPIRATION; ALIMENTARY; TRACT; TELESCOPE; INNER;
   OUTER; TUBE; INFLATE; TUBE; DILATED; HAND; PUMP!
DC- A96; P31; P34|
IC- <MAIN> A61B-017/50|
IC- <ADDITIONAL> A61B-017/42; A61M-001/00; A61M-039/08|
MC- <CPI> A12-V03DI
FS- CPI; EngPI||
            (Item 5 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
IM- *Image available*
AA- 96-087487/199609|
XR- <XRPX> N96-073401|
TI- Intravascular device for pressurising fluid extract
   material - has independent movable fluid input and output which can be
    advanced over guide wire having fluid ports holes located immediately
    adjacent distal end|
PA- SCIMED LIFE SYSTEMS INC (SCIM-N) |
AU- <INVENTORS> KEITH P T; WILLARD K C|
NC- 019|
```

NP- 003|

PN- WO 9601079 A1 19960118 WO 95US8106 A 19950629 A61B-017/20 199609 B PN- US 5536242 A 19960716 US 94269715 A 19940701 A61M-001/00 199634 <AN> US 95547964 A 19951025

PN- US 5843022 A 19981201 US 95547964 A 19951025 A61M-001/00 199904 N <AN> US 96655335 A 19960524|

AN- <LOCAL> WO 95US8106 A 19950629; US 94269715 A 19940701; US 95547964 A 19951025; US 95547964 A 19951025; US 96655335 A 19960524

AN- <PR> US 94269715 A 19940701; US 95547964 A 19951025; US 96655335 A 19960524|

CT- US 3526219; US 5259842; US 5307609; US 5318518; US 5320599; US 5391145; FD- WO 9601079 A1

<DS> (National): CA JP

<DS> (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

FD- US 5536242 A Cont of US 94269715 FD- US 5843022 A Cont of US 95547964

Cont of US 5536242|

LA- WO 9601079(E<PG> 69); US 5536242(27)|

DS- <NATIONAL> CA JP|

DS- <REGIONAL> AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE|

AB- <BASIC> WO 9601079 A

An elongate catheter shaft has proximal and distal ends, including a fluid input tube and a fluid extraction tube, the fluid input tube being longitudinally movable relative to the fluid extraction tube. The fluid input tube defines a fluid input lumen, with the fluid extraction tube defining a fluid extraction lumen. A pressurised fluid source is connected to the proximal end of the shaft and in fluid communication with the fluid input lumen. A pressurised fluid collector is connected to the proximal end of the shaft and in fluid communication with the extraction lumen.

A nozzle is attached to the distal end of the fluid input tube and in fluid communication with the fluid input lumen. A control system is operatively connected to the pressurised fluid source and the pressurised fluid collector. A fluid dynamic sensor is positioned in either the fluid input lumen or the fluid extraction lumen, the fluid dynamic sensor operatively connected to the control system.

ADVANTAGE - Laterally directed fluid allows the device to dislodge material immediately adjacent the distal end of the device without first traversing the occlusion and also reduces the risk of distal embolization, and the device also utilises independently movable fluid input and fluid extraction lumens to maximise vascular accessibility and remove clogs that form in the extraction lumen.

Dwg.1a/8|

AB- <US> US 5536242 A

A fluid system for the extraction of **vascular** occluding material, comprising:

- a. an elongate catheter shaft having a proximal end and a distal end, the elongate shaft including a fluid input tube and a fluid extraction tube, the fluid input tube being longitudinally movable relative to the fluid extraction tube;
 - b. the fluid input tube defining a fluid input lumen;
 - c. the fluid extraction tube defining a fluid extraction lumen;
- d. a pressurized fluid source connected to the proximal end of the shaft and in fluid communication with the fluid input lumen;
- e. a pressurized fluid collector connected to the proximal end of the shaft and in fluid communication with the extraction lumen;
- f. a nozzle attached to the distal end of the fluid input tube and in fluid communication with the fluid input lumen;
- g. a control system operatively connected to the pressurized fluid source and the pressurized fluid collector; and
- h. a fluid dynamic sensor positioned in either the fluid input lumen or the fluid extraction lumen, the fluid dynamic sensor operatively connected to the control system.

Dwg.1a/8|

DE- <TITLE TERMS> INTRAVASCULAR; DEVICE; PRESSURISED; FLUID; EXTRACT; OCCLUDE; MATERIAL; INDEPENDENT; MOVE; FLUID; INPUT; OUTPUT; CAN; ADVANCE; GUIDE; WIRE; FLUID; PORT; HOLE; LOCATE; IMMEDIATE; ADJACENT; DISTAL; END|

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DC- P31; P34|
IC- <MAIN> A61B-017/20; A61M-001/00|
IC- <ADDITIONAL> A61B-017/22; A61M-003/00; A61M-003/02|
FS- EngPI||
 22/4/6
            (Item 6 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
IM- *Image available*
AA- 92-331659/199240|
XR- <XRAM> C92-147458|
XR- <XRPX> N92-2533331
TI- Biochemical cells nucleic acid extn. system - comprises exchangeable
    sample vessel closingly engageable with reaction vessel contg.
   capillary |
PA- MALMOUIST M (MALM-I) |
AU- <INVENTORS> MALMQUIST M|
NC- 019|
NP- 010|
PN- WO 9215597 A1 19920917 WO 92SE151
                                         A 19920311 C07H-001/08
                                                                   199240 B
PN- AU 9213443 A 19921006 AU 9213443
                                            19920311 C07H-001/08
                                                                   199301
    <AN> WO 92SE151 A 19920311
PN- SE 9100725 A 19920912 SE 91725
                                         A 19910311 C07H-001/08
                                                                   199319
                Al 19931229 EP 92905907 A 19920311 C07H-001/08
PN- EP 575387
                                                                   199401
    <AN> WO 92SE151 A 19920311
PN- JP 6510421 W 19941124 JP 92505643 A 19920311 C12P-019/34
                                                                   199506
    <AN> WO 92SE151 A 19920311
PN- US 5436328 A 19950725 WO 92SE151
                                        A 19920311 C07H-021/00
                                                                   199535
    <AN> US 93117051 A 19931129
PN- AU 665750
              B 19960118 AU 9213443
                                        A 19920311 C07H-001/06
                                                                   199620
                C2 19960812 SE 91725
                                         A 19910311 B01L-001/00
PN- SE 503729
                                                                   199638
PN- EP 575387
                B1 19970604 EP 92905907 A 19920311 C07H-001/08
                                                                   199727
    <AN> WO 92SE151 A 19920311
PN- DE 69220213 E 19970710 DE 620213
                                        A 19920311 C07H-001/08
                                                                   199733
    <AN> EP 92905907 A 19920311
                     A 19920311|
    <AN> WO 92SE151
AN- <LOCAL> WO 92SE151 A 19920311; AU 9213443 A 19920311; WO 92SE151 A
    19920311; SE 91725 A 19910311; EP 92905907 A 19920311; WO 92SE151 A
    19920311; JP 92505643 A 19920311; WO 92SE151 A 19920311; WO 92SE151 A
    19920311; US 93117051 A 19931129; AU 9213443 A 19920311; SE 91725 A
    19910311; EP 92905907 A 19920311; WO 92SE151 A 19920311; DE 620213 A
    19920311; EP 92905907 A 19920311; WO 92SE151 A 199203111
AN- <PR> SE 91725 A 19910311|
CT- EP 338591; JP 60049887; JP 61053090; JP 62254992; JP 64044296; US
    3432487; US 4997932|
FD- WO 9215597 A1
    <DS> (National): AU CA JP US
    <DS> (Regional): AT BE CH DE DK ES FR GB GR IT LU MC NL SE
FD- AU 9213443 A Based on
                                                 WO 9215597
                Al Based on
FD- EP 575387
                                                 WO 9215597
    <DS> (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL
FD- JP 6510421 W Based on
                                                 WO 9215597
FD- US 5436328 A Based on
                                                 WO 9215597
FD- AU 665750
                B Previous Publ.
                                                 AU 9213443
               Based on
                                             WO 9215597
FD- EP 575387
               B1 Based on
                                                 WO 9215597
    <DS> (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL
FD- DE 69220213 E Based on
                                                 EP 575387
                                             WO 9215597|
               Based on
LA- WO 9215597(E<PG> 13); EP 575387(E); JP 6510421(6); US 5436328(6); EP
    575387 (E<PG> 8) |
DS- <NATIONAL> AU CA JP US|
DS- <REGIONAL> AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LU; MC; NL; SE; LI|
AB- <BASIC> WO 9215597 A
        Method and appts. (1) for nucleic acid extn. i.e. from biochemical
    cells, comprises exchangeable sample vessels (2) engageable to form a
```

closed system with a reaction vessel (3) having one or more capillaries communicating with the sample vessel (2) in use.

Processing involves centrifuging the closed system to bring nucleic acid binding medium from the reaction vessel (3) to the sample vessel (2) in use, the latter also contg. a membrane denaturating medium and being allowed incubation time.

ADVANTAGE - Closed system avoids contamination. Dwg.3/3|

AB- <EP> EP 575387 B

A method to perform nucleic acid extraction in a closed system, wherein (a) a nncleic acid containing sample is added to a reaction vessel (2A) containing a membrane denaturating medium (7), and theses are allowed to incubate; (b) an orifice (5) being situated in the lid (4) of the reaction vessel (2A) is arranged over the upper portion of a capillary (12), containing nucleic acid bindng medium (13) (denser than water) and being tightly secured against the bottom of a second reaction vessel (3), the reaction vessesl (2A) and (3), respectively forming a closed unit comprising an open passage from the capillary (12) to the bottom of the reaction vessel (2A); (c) the closed unit is centrifugated with the bottom of the reaction vessel (2A) directed downwards, whereby the nucleic acid binding medium is brought into the reaction vessel (2A); (d) the contents in the reaction vessel (2A) is mixed, whereby nucleic acid in the sample binds to the nucleic acid binder (13); (e) the closed unit is centrifugated with the bottom of the reaction vessel (3) directed downards, whereby the nucleic acid binding medium with bound nucleic acid is brought into the capillary (12); (f) the reaction vessel (2A) is discarded and replaced with a new reaction vessel (2B) comprising washing buffer and the centrifugation according to (c) and (e) are repeated with mixing therebetween, (g) the reaction vessel (2B) is discarded and replaced with a new reaction vessel (2C) comprising medium causing the nucleic acid to dissociate from the nucleic acid binding medium (13) and the centrifugation according to (c) is repeated, whereby the nucleic acid dissociates from the nucleic acid binder and is brought in solution, and the nucleic acid binder sediments to the bottom of reaction vessel (2C) and (h) the reaction vesses1 (3) and (2C) are disconnected and the nucleic acid in the reaction vessel (2C) is subjected to further analysis.

Dwg.1+2/3|

AB- <US> US 5436328 A

Extraction of nucleic acid comprises incubating a cell sample with a membrane denaturing medium in a reaction phial to which other phials can be fitted to form a closed system; then mounting a second phial with a capillary tube link, contg. a nucleic acid binding agent, onto the top of the first phial, transferring the binding agent to the first reaction phial; the bound nucleic acid is sepd. and treated with a wash buffer soln; then sepd. again and treated with a dissociating medium; and the liberated nucleic acid is sepd. as aq. soln.

 $\ensuremath{\mathsf{USE}}$ - The process and equipment facilitate the isolation of nucleic acid from cell samples.

ADVANTAGE - The process is conducted in a closed system, avoiding unwanted contamination from air-borne microorganisms, spores or enzymes.

Dwg.0/3|

DE- <TITLE TERMS> BIOCHEMICAL; CELL; NUCLEIC; ACID; EXTRACT; SYSTEM; COMPRISE; EXCHANGE; SAMPLE; VESSEL; ENGAGE; REACT; VESSEL; CONTAIN; CAPILLARY |

DC- B04; D16; J04; S03|

IC- <MAIN> B01L-001/00; C07H-001/06; C07H-001/08; C07H-021/00; C12P-019/34|

IC- <ADDITIONAL> B01L-003/14; B01L-011/00; C12M-001/00; C12M-001/24; C12M-001/25; C12N-015/10; C12Q-001/25; C12Q-001/68; G01N-001/28|

MC- <CPI> B04-B04A1; D05-H12; D05-H13; J01-C01; J04-B

MC- <EPI> S03-E13D; S03-E14H|

FS- CPI; EPI!!

22/4/7 (Item 7 from file: 351)

DIALOG(R) File 351: DERWENT WPI

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IM- *Image available*
AA- 91-140123/199119|
XR- <XRPX> N91-107813|
TI- Thrombus extraction system - includes outer flexible tube, inner
    flexible tube disposed in lumen of outer flexible tube and expandable
    body
PA- GINSBURG R (GINS-I)|
AU- <INVENTORS> GINSBURG R|
NC- 001|
NP- 001|
PN- US 5011488 A 19910430 US 90569751 A 19900820
                                                                   199119 B
AN- <LOCAL> US 90569751 A 19900820|
AN- <PR> US 88280859 A 19881207; US 90569751 A 19900820|
AB- <BASIC> US 5011488 A
        The vascular catheter system comprises an outer flexible tube, an
    inner flexible tube disposed in the lumen of the outer flexible tube,
    and an expandable body mounted at the distal end of the third flexible
    tube disposed in the lumen of the inner flexible tube. The catheter
    system is suitable for percutaneous introduction to a blood
    where the distal end may be located proximate a region of clot or
    thrombus. By extending the expandable body through the region of clot
    or thrombus, the obstructing material may be dislodged from the blood
    vessel wall and drawn toward the open distal end of the inner tube.
         The inner tube includes an expandable tip which will open to
    extend substantially across the blood vessel . In this way, the
    expandable tip will be positioned to collect all of the dislodged clot
    and thrombus. By withdrawing both the inner tube and the expandable
    body back into the outer flexible tube, the catheter system may be
    withdrawn from the patient without appreciable loss of the clot or
    thrombus. (9pp Dwg.No.1/5E)|
DE- <TITLE TERMS> THROMBUS; EXTRACT; SYSTEM; OUTER; FLEXIBLE; TUBE; INNER;
    FLEXIBLE; TUBE; DISPOSABLE; LUMEN; OUTER; FLEXIBLE; TUBE; EXPAND; BODY|
DC- P34!
IC- <ADDITIONAL> A61M-025/00|
FS- EngPI||
 22/4/8
           (Item 8 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
AA- 90-347830/1990461
XR- <XRPX> N90-265796|
TI- Excimer laser atherectomer catheter - using mobile fibre-optic shelf
    delivering laser energy to obstruction to sever from vessel wall|
PA- BETH ISRAEL HOSPITAL ASSOC (BETH-N) |
AU- <INVENTORS> BAIM D; KUNTZ R E|
NC- 001|
NP- 001|
PN- US 4966596 A 19901030 US 88229622 A 19880808
                                                                   199046 B
AN- <LOCAL> US 88229622 A 198808081
AN- <PR> US 88229622 A 19880808|
AB- <BASIC> US 4966596 A
        A guide wire is inserted into an artery to a point beyond an
    eccentric vascular obstruction. A catheter is inserted over the guide
    wire into the artery , the catheter having a housing including a
    radially located cut-out window on one surface. The cut-out window
    exposes a housing cavity, with a balloon attached to an opposite
    exterior surface, the housing containing a mobile bundle of fibre optic
    cables, the bundle being flattened at an end of the bundle proximal to
    the cut-out window and the bundle connected to a laser energy source at
    an opposite end.
```

The cut-out window is positioned over the eccentric **vascular** obstruction. The balloon is inflated such that the eccentric **vascular obstruction** extends through the **cut** -**out** window into the housing.

Laser energy is delivered across the cut-off window while advancing the flattened end of the mobile bundle of fibre optic cables across the cut-off window to a and to retain the eccentric vascular obstruction within the housing.

USE - To remove an eccentric vascular obstruction from a patient using laser energy excision.

Dwg.4/11|

DE- <TITLE TERMS> EXCIMER; LASER; CATHETER; MOBILE; FIBRE; OPTICAL; SHELF; DELIVER; LASER; ENERGY; OBSTRUCT; SEVER; VESSEL; WALL!

DC- P31; S05|

IC- <ADDITIONAL> A61B-017/36|

MC- <EPI> S05-B|

FS- EPI; EngPI||

(Item 9 from file: 351) 22/4/9

DIALOG(R) File 351: DERWENT WPI

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AA- 85-290471/198547|

XR- <XRAM> C85-125794|

XR- <XRPX> N85-216551|

TI- Blood filter for **blood** vessel - with unfolding capacity after insertion or with unfolding elements|

PA- HENGST W & CO GMBH (HENG-N) |

AU- <INVENTORS> ROTTGERING G; RUHLAND D|

NC- 0011

NP- 0021

PN- DE 3417738 A 19851114 DE 3417738 A 19840512

198547 B 1986401

PN- DE 3417738 C 19861002

AN- <LOCAL> DE 3417738 A 19840512| AN- <PR> DE 3417738 A 19840512; DE 3429850 A 19840814|

LA- DE 3417738(13)|

AB- <BASIC> DE 3417738 A

A blood filter can be inserted into a **blood vessel** of a patient with a risk of embolism, e.g. after an operation. Such a filter (1) is made of a plastic which is compatible with human tissue and is inserted and extracted by a catheter or needle. The insertion takes place in a folded state but when released, the cylindrical contact surfaces (2) spread out against the walls of the blood vessel . These surfaces can be structured, e.g. by fine barbed hooks (3) to give a good hold. In another version, spreading elements inside can be expanded by a central rod.

ADVANTAGE - Such a filter is easy to insert and to extract with any blood clot .

1/4|

AB- <DE> DE 3417738 C

A blood filter can be inserted into a blood vessel of a patient with a risk of embolism, e.g. after an operation. Such a filter (1) is made of a plastic which is compatible with human tissue and is inserted and extracted by a catheter or needle. The insertion takes place in a folded state but when released, the cylindrical contact surfaces (2) spread out against the walls of the blood vessel . These surfaces can be structured, e.g. by fine barbed hooks (3) to give a good hold. In another version, spreading elements inside can be expanded by a central rod.

ADVANTAGE - Such a filter is easy to insert and to extract with any blood clot . (13pp Dwg.No.1/4) |

DE- <TITLE TERMS> BLOOD; FILTER; BLOOD; VESSEL; UNFOLD; CAPACITY; AFTER; INSERT; UNFOLD; ELEMENT |

DC- B07; P34|

IC- <ADDITIONAL> A61M-001/34|

MC- <CPI> B04-B04D; B11-B; B11-C02; B11-C04B

FS- CPI; EngPI||

22/4/10 (Item 10 from file: 351)

DIALOG(R) File 351: DERWENT WPI

```
AA- 85-063350/198511|
XR- <XRPX> N85-047474|
TI- Ink jet printer - has collector and pump unit to extract
  bubbles from ink
PA- RICOH KK (RICO ) |
AU- <INVENTORS> AMEYAMA M; ISAYAMA T; KATANO Y; MATSUMOTO S; YAMAZAKI H|
NP- 0031
PN- DE 3430142 A 19850307 DE 3430142
                                            19840816
                                                                   198511 B
PN- US 4586058 A 19860429 US 84640126 A
                                           19840813
                                                                   198620
PN- DE 3430142 C
                 19880616
                                                                   1988241
AN- <LOCAL> DE 3430142 A 19840816; US 84640126 A 19840813|
AN- <PR> JP 83148927 A 19830815|
LA- DE 3430142(15)|
AB- <BASIC> DE 3430142 A
```

The ink jet printer has a head (10) mounted on a frame (22) and has a nozzle outlet (58) at one end. Ink is supplied from a reservoir (38) through a line (48) to a channel in a block (30) that connects with a non-return valve (32). The valve outlet connects with a capillary channel (10) leading to the nozzle.

In order to eliminate air contained within the ink, the head is moved to a position where the nozzles locate in front of a collector (56). The collector has a line coupled to an intermediate storage unit (64) that connects to a piston (68) type pump (62) that allows ink to be drawn through the nozzles.

ADVANTAGE - Eliminates air bubbles.

1/41

AB- <DE> DE 3430142 C

A bubble eliminator uses an upward vent channel on the ink supply line and a bubble catcher with nonreturn valve opening with pressure rise from a setpoint plus an ink trap in the ink suction pump line. The ink supply channel (30) pref. branches into the upwards vent channel (30a) and a feed channel (30b) descend to the ejector.

The bubble catcher (32,34,54) pref. connects to an outward bubble discharge channel (36) through the nonreturn valve (34) and the ink supply channel, catcher and discharge channel are pref. in a jet printer ejector holder (22). During bubble discharge, a cap (56) seals off the ejector nozzle and discharge channel entry. A bubble discharger (60,64,62) pref. contains a suction device (62) which draws bubbles into the discharge channel and ink into the ejector nozzle.

USE/ADVANTAGE - Jet ink printing. Cap keeps ink out of bubble discharge and prevents nozzles drying out. (8pp) |

AB- <US> US 4586058 A

Ink is routed from a supply cartridge to a number of nozzles. A head holder, which has the nozzles, is formed with a path for delivering ink from the cartridge to the nozzles. The ink supply path branches into an upwardly extending passageway and a downwardly extending passageway.

The ink is supplied to the nozzles by way of the downward passageway. A check valve is positioned in the upward passageway for trapping bubbles entrained by the ink. The bubbles trapped by the check valve are discharged by a suction pump through a channel located in the head. (8pp)

DE- <TITLE TERMS> INK; JET; PRINT; COLLECT; PUMP; UNIT; EXTRACT; AIR; BUBBLE; INK| DC- P75; T04|

IC- <ADDITIONAL> B41J-003/04; B41J-027/00; G01D-015/16|

MC- <EPI> T04-G02; T04-G02A|

FS- EPI; EngPI||

22/4/11 (Item 11 from file: 351) DIALOG(R)File 351:DERWENT WPI (c)1999 Derwent Info Ltd. All rts. reserv.

```
TI- Main artery prosthesis process - involves replacing artery section
   with complete occlusion by venous sinus of dura mater|
PA- GORKII KIROV MEDICAL INS (GOKI ) |
AU- <INVENTORS> AVERYANOV Y U A; KOROLEV B A; MATYUSHIN I F|
NC- 0011
NP- 001|
                                                                   198126 B
PN- SU 770481
                B 19801018
AN- <PR> SU 2706991 A 19790104|
AB- <BASIC> SU 770481 B
        Twenty four hours before the operation, the sinus of the dura mater
    taken from a cadaver is washed under sterile conditions in 0.9 per cent
    salt soln. with the addn. of antibiotics. Under general intratracheal
   narcosis with relaxants, a 10-12cm. incision is made in the skin and
    subcutaneous fat along the front surface of the femur and then in the
   broad fascia of the femur. Then the femoral artery is sepd. from the
    group of vessels. The proximal and distal sections of the artery are
    clamped and the section with complete occlusion cut
                                                           out . Into the
    gap the venous sinus of the dura mater with dia. corresp. to the
    vessel's normal dimensions is sewn, using a continuous suture and non
    traumatic needle. Then the wound is sutured.
        This method reduces trauma and the risk of thrombosis. Almost any
    length of artery can be replaced as 2-3 dura mater venous sini can be
    sewn together. Bul.38/15.10.80.
DE- <TITLE TERMS> MAIN; ARTERY ; PROSTHESIS; PROCESS; REPLACE; ARTERY ;
    SECTION; COMPLETE; OCCLUDE; VEIN ; SINUS!
DC- P311
IC- <ADDITIONAL> A61B-017/00|
FS- EngPI||
             (Item 12 from file: 351)
 22/4/12
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
AA- 80-78803C/198044|
TI- Therapeutic radioactive carbon powder prepn. - by subjecting carbon to
    radon gas evolved from radium ore in an evacuated vessel|
PA- IMAMURA Y (IMAM-I) |
AU- <INVENTORS> IMAMURA Y|
NC- 0011
NP- 0011
PN- US 4228146 A 19801014
                                                                   198044 B
AN- <PR> US 78955164 A 19781027; US 77846501 A 19771027|
AB- <BASIC> US 4228146 A
        Radioactive carbon powder is produced by placing the pre-heated
    non-radioactive carbon powder in a vessel with an airtight lid, the
    inside of the lid being filled with radium ore. The radium ore is
    sprayed with water, the lid closed and air extracted . The rado
    emitted by the radium ore is absorbed by the hot carbon.
        No specific use for the composition as such are given, only those
    of the individual components; i.e. carbon black absorbs bacteria,
    serum, lymph and "filth" from wounds and radon is used for treating
    rheumatism, neuritis, hypertension, blood vessel inflammation,
    angina pectoris, allergies, skin diseases, geriatric disorders,
    dimateric disorders and for promoting the growth of retarded genitals.
    The composition has prolonged effects.
DE- <TITLE TERMS> THERAPEUTIC; RADIOACTIVE; CARBON; POWDER; PREPARATION;
    SUBJECT; CARBON; RADON; GAS; EVOLVE; RADIUM; ORE; EVACUATE; VESSEL!
DC- B06; K081
IC- <ADDITIONAL> A61K-043/00|
MC- <CPI> B05-A04; B12-A01; B12-A07; B12-D02; B12-D07; B12-D09; B12-E01;
    B12-E02; B12-E09; B12-F02; B12-F05; B12-G04; K08-B; K09-B; K09-E|
FS- CPI||
```

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DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
AA- 75-C3503W/197509|
TI- Tubular sample container with sealing plug - has screwed extraction
    collar for pushfit closure plug removal|
PA- D A HAM (HAMD-I) |
NC- 003|
NP- 0031
PN- DE 2438892 A 19750220
                                                                   197509 B
PN- SE 7410337 A 19750317
                                                                   197515
PN- FR 2240871 A 19750418
                                                                   1975221
AN- <PR> GB 7348948 A 19731019; GB 7338633 A 19730815|
AB- <BASIC> DE 2438892 A
        A tub ular container, such as a test tube, has an external thread
    along its open end. To obtain a vacuum proof seal, a flanged plastic
    plug is pressed into the open end. A collar which screws onto the
    outside thread of the tube, and which is of the same outside diameter
    as the plug flange, presses against the facing side of the flange, thus
    extracting the plug from the container in a controlled manner. When the
    sealed container is used to collect a blood sample, it is placed inside
    a tubular holder which carries an injection needle. One end of the
    needle is pushed through the plug flange whilst the other end of it
    enters the vein . |
DE- <TITLE TERMS> TUBE; SAMPLE; CONTAINER; SEAL; PLUG; SCREW; EXTRACT;
    COLLAR; CLOSURE; PLUG; REMOVE|
DC- P33; Q32; Q34|
IC- <ADDITIONAL> A61J-001/00; B65D-035/00; B65D-081/20|
FS- EngPI||
             (Item 14 from file: 351)
 22/4/14
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
AA- 72-00780T/197201|
TI- Extraction of surfactants from atelectazided parts!
PA- CHERNOVITS MEDICINE INST (CHE -N) |
NP- 001|
                                                                    197201 B
PN- SU 294611
AN- <PR> SU 1398385 A 19700124|
AB- <BASIC> SU 294611 A
        This invention relates to studies of the pathology of lung tissue.
    Process comprising extraction in a closed system with perfusion of
    the lung tissue, binding up the vessels, alternately compressing and
    exhausting the air, collecting and drying the perfusing liquid is
    improved by binding up the broncho-vascular bunch, washing the
    cardia-pulmonary preparation with a physiological soln. through the
    lower part of vena cava and squeezing aorta . By this method, a
    preparation free of contamination with blood is obtained.
DE- <TITLE TERMS> EXTRACT; SURFACTANT; PART
DC- B04; P34|
IC- <ADDITIONAL> A61L-010/00|
MC- <CPI> B04-B04H; B11-C|
FS- CPI; EngPI||
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?show files;ds
File 351:DERWENT WPI 1963-1999/UD=9923;UP=9923;UM=9923
         (c) 1999 Derwent Info Ltd
File 344: Chinese Patents ABS Apr 1985-1999/Jun
         (c) 1999 European Patent Office
File 347: JAPIO Oct 1976-1999/Feb. (UPDATED 990603)
         (c) 1999 JPO & JAPIO
Set
        Items
                Description
                OCCCLUSION? ? OR BLOCKAGE? ? OR CLOSURE? ? OR OCCLUDED OR -
S1
       772092
             CLOSED OR BLOCKED OR CLOT? OR AIR()BUBBLE? ? OR EMBOLISM? ? OR
              THROMBO() EMBOLISM? ? OR THROMBOEMBOLISM? ? OR THROMBOSIS OR -
             THROMBUS OR OBSTRUCT?
                S1 OR OCCLUSION? ?
S2
       775996
S3
        51553
                BLOOD(2N) VESSEL? ? OR ARTERY OR ARTERIES OR CAPILLAR? OR V-
             EIN OR AORTA OR VENA() CAVA OR ARTERIA OR VENA OR ARTHEROSCLER-
      1213270
                PRESSURE? ? OR PRESSURI?ED OR PSI OR POUNDS()PER()SOUARE()-
S4
             INCH
                CATHETER? ? OR TUBE? ? OR CANNULA? ? OR PIPE? ? OR SIPHON?
S5
      1221271
             OR SYPHON? OR VENTURI
S6
          793
                S2 AND S3 AND S4 AND S5
S7
                S2 (10N) S3 (10N) S4 (10N) S5
          185
S8
         7492
                S2(2N) (REMOV? OR ASPIRAT? OR TAKE?()AWAY OR EXCIS? OR SUCK-
             ()OUT)
S9
           11
                S3(S)S4(S)S5(S)S8
S10
           16
                S3(S)S4(S)S8
                S3(S)S5(S)S8
S11
           71
                S9:S10
S12
           16
           67
                S11 AND IC=(A61B OR A61H OR A61M)
S13
?t12/4/all
            (Item 1 from file: 351)
 12/4/1
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
IM- *Image available*
AA- 99-223214/199919|
XR- <XRAM> C99-065186|
TI- Air
        bubble detection and removal system for removing
  bubbles formed in aqueous solution or water - has flow path changeover
    valves for pressure deaeration, decompression valve and capillary
   tube for decompression aeration and on-line deaerator using deaeration
    filml
PA- JGC CORP (JAGA ); UCHU KAIHATSU JIGYODAN (UCHU-N); ZH UCHU KANKYO RIYO
    SUISHIN CENT (UCHU-N) |
NC- 0011
NP- 001|
PN- JP 11057308 A 19990302 JP 97222409 A 19970819 B01D-019/02
                                                                    199919 B
AN- <LOCAL> JP 97222409 A 19970819|
AN- <PR> JP 97222409 A 19970819|
LA- JP 11057308(7)|
AB- <BASIC> JP 11057308 A
        NOVELTY - Switching valves (V1-V3) changes flow path from high
    pressure pump to pressurise liquid for pressure deaeration when
    detector (D) detects air bubbles. A capillary tube and decompression
    valve (V5) decompresses deaeration of bubbles. An on-line deaerator
    (DG) is provided for deaeration using deaeration film for bubbles
    detected after decompression deaeration. DETAILED DESCRIPTION - A
    controller is provided for controlling the flow path changeover valves
    and the decompression valve of the dissolver.
        USE - For deaeration of air bubbles in aqueous solutions or water
    under micro gravity such as experiments in space.
        ADVANTAGE - Enables automation as controller is provided for flow
    path changeover valves. Enables reliable deaeration as combined
    deaeration system is used. Improves success rate of experiments as
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reliable deaeration of bubbles is carried out. DESCRIPTION OF

DRAWING(S) - The figure shows schematic outline of air bubble detection and removal system. (V1- V3) Switching valves; (V5) Decompression valve.

Dwg.1/3|

DE- <TITLE TERMS> AIR; BUBBLE; DETECT; REMOVE; SYSTEM; REMOVE; AIR; BUBBLE; FORMING; AQUEOUS; SOLUTION; WATER; FLOW; PATH; CHANGEOVER; VALVE; PRESSURE; DEAERATE; DECOMPRESS; VALVE; CAPILLARY; TUBE; DECOMPRESS; AERATE; LINE; DEAERATE; DEAERATE; FILM|

DC- D15; J01|

IC- <MAIN> B01D-019/02|

IC- <ADDITIONAL> B01D-019/00; B01D-061/00; B01D-071/70|

MC- <CPI> D04-A01K; J01-D02|

FS- CPIII

12/4/2 (Item 2 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

IM- *Image available*

AA- 98-495477/199842|

DX- <RELATED> 98-018243; 98-018245; 98-018246; 98-495478; 98-495558; 98-495561

XR- <XRPX> N98-387039|

TI- Intravascular aspiration system - has kit with selection of catheters used to create space in the area of an occlusion, treat the occlusion and remove any debris released and aspirate the blood vessel|

PA- PERCUSURGE INC (PERC-N)|

AU- <INVENTORS> MUNI K P; ZADNO-AZIZI G|

NC- 0801

NP- 002|

PN- WO 9838929 A1 19980911 WO 98US4366 A 19980306 A61B-017/22 199842 B

PN- AU 9866883 A 19980922 AU 9866883 A 19980306 A61B-017/22 199908|

AN- <LOCAL> WO 98US4366 A 19980306; AU 9866883 A 19980306|

AN- <PR> US 97813807 A 19970306

FD- WO 9838929 A1

<DS> (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG
UZ VN YU ZW

<DS> (Regional): AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

FD- AU 9866883 A Based on

WO 98389291

LA- WO 9838929(E<PG> 26)|

DS- <NATIONAL> AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI
GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN
YII ZWI

DS- <REGIONAL> AT; BE; CH; DE; DK; EA; ES; FI; FR; GB; GH; GM; GR; IE; IT; KE; LS; LU; MC; MW; NL; OA; PT; SD; SE; SZ; UG; ZW|

AB- <BASIC> WO 9838929 A

The kit containing catheters used in the treatment of stenosis or an occlusion(56) in a blood vessel(5) comprises one or more catheters used in combination. One catheter has an occlusive head(52) to create working space in the area surrounding the occlusion, a therapy catheter is used to treat the occlusion and a third tubular(60) catheter is used for removal of debris(58) and to aspirate the blood vessel.

Each catheter is capable of independent manipulation within the blood vessel during treatment. The catheter fitted with the occlusive head has a long tubular body, an inflatable balloon mounted at the far end and coil mounted on a core wire and joined to the far end of the tubular body. The catheter kit is suitable for the

removal of occlusions from saphenous vein grafts, the coronary and
carotid arteries , arteries above the aortic arch and vessels of
similar size and pressure .

USE - Cardiac surgery, treatment of stenosis or an occlusion, aspirating emboli, thrombi and other types of particles from the human arterial or venous system, suitable for the removal of occlusions from

saphenous vein grafts, the coronary and carotid arteries, arteries above the aortic arch and vessels of similar size and pressure, treats blocked veins and arteries , increases blood flow, reduced risk of eventual cardiac failure. Dwg.9/11| DE- <TITLE TERMS> INTRAVASCULAR; ASPIRATE; SYSTEM; KIT; SELECT; CATHETER; SPACE; AREA; OCCLUDE; TREAT; OCCLUDE; REMOVE; DEBRIS; RELEASE; ASPIRATE ; BLOOD; VESSEL! DC- P31; P34| IC- <MAIN> A61B-017/22| IC- <ADDITIONAL> A61M-025/00| FS- EngPI|| 12/4/3 (Item 3 from file: 351) DIALOG(R) File 351: DERWENT WPI (c) 1999 Derwent Info Ltd. All rts. reserv. IM- *Image available* AA- 96-517756/199651| XR- <XRAM> C96-162471| XR- <XRPX> N96-436374| TI- Soft tissue fixing device for bone for blood vessel occlusion surgery comprises biodegradable plastic brush with bristles deflecting on insertion in hole with loop, cloth or fixing for tendon, for min. effortl PA- LEVEEN E G (LEVE-I); LEVEEN H H (LEVE-I); LEVEEN R F (LEVE-I)| AU- <INVENTORS> LEVEEN E G; LEVEEN H H; LEVEEN R F! NP- 0011 PN- US 5573547 A 19961112 US 93138689 A 19931019 A61B-017/00 199651 B AN- <LOCAL> US 93138689 A 19931019| AN- <PR> US 93138689 A 19931019|

- LA- US 5573547(12)|
- AB- <BASIC> US 5573547 A

Device (10) for fixing a tissue to a bone (13), comprises:

- (i) a brush (10) with stem with elongated bristles (14) attached spaced apart and crosswise to a portion of the stem, the average distance over opposing bristles defining the brush diameter;
- (ii) means allowing for resilient angular deflection of at least the ends of bristles enabling insertion of the brush into a smaller dia. hole, the bristles deflected in the opposite direction from insertion; and
- (iii) a cloth (16) fastened to and extending from an end (15) of the brush with a widened portion for overlapping and joining to the tissue.

Also claimed are:

- (a) a device for fixing tissue to bone comprising a cutting point on brush for forming the hole by boring;
- (b) a device for fixing tissue to a bone comprising means for attaching tissue directly to brush;
- (c) a device for fixing tissue to a bone comprising bristles of which at least a portion are resilient, and having concave surfaces at free ends;
- (d) a device for insertion into a vessel for bidirectional fluid flow for occlusion;
- (e) a device for fixing tissue to a bone comprising a brush formed from wires, tapered to sharpened ends and rigid enough at one end to pierce tissue;
- (f) a device for fixing tissue to a bone comprising a brush which tapers to end which is inserted in bone;
- (g) a method of fixation for use in a body of an animal, or human, to fixate a tissue to a bone;
- (h) a method of fixing tissue to a bone in a body of an animal, or human comprising joining tissue to overlapping widened portion of cloth strip;
 - (i) a method of fixing a tissue to a bone in a body of an animal or

human comprising fixing tissue to cloth strip;

- (j) a method for fixing a tissue to a bone comprising inserting the brush to deflect bristles and attaching the tissue to the brush;
- (k) a method for fixing a tissue to a bone comprising fixing the tissue to a loop on the end of the brush;
- (1) a method for fixing a tissue to a bone comprising deflecting the bristles from 30deg. - 60deg.;
- (m) a method for fixing tissue to a bone comprising permitting angular deflection of brushes with concave ends;
- (n) a method for packaging a device for insertion into a vessel for bidirectional fluid flow for occlusion comprising using a brush with bristle diameter greater than stem diameter; and
- (o) a method for fixing a tissue to a bone comprising inserting the brush to bend the bristles.

USE - Attachment of soft tissues to bone (claimed) during surgery, and for occluding blood vessels, and straining blood flow.

ADVANTAGE - Minimal effort is required to fix tissue to bone. Pressure points on bone are minimised. Devices are completely

biodegradable, eliminating the need for future removal . Occlusion of varied size blood vessels is achieved with reduced risk of embolisation.

Dwg.1/6|

DE- <TITLE TERMS> SOFT; TISSUE; FIX; DEVICE; BONE; BLOOD; VESSEL; OCCLUDE; SURGICAL; COMPRISE; BIODEGRADABLE; PLASTIC; BRUSH; BRISTLE; DEFLECT; INSERT; HOLE; LOOP; CLOTH; FIX; TENDON; MINIMUM; EFFORT|

DC- A96; D22; P31|

IC- <MAIN> A61B-017/00|

MC- <CPI> A12-V02; D09-C01B; D09-C01D|

FS- CPI; EngPI||

12/4/4 (Item 4 from file: 351)

DIALOG(R) File 351: DERWENT WPI (c)1999 Derwent Info Ltd. All rts. reserv.

IM- *Image available*

AA- 95-073186/199510|

XR- <XRPX> N95-057981|

TI- Catheter for removing clots from patient's blood vessels has inner high pressure lumen inside low pressure lumen produced by extrusion mechanism

PA- CORDIS EUROPA NV (CRDC); CORDIS CORP (CRDC)|

AU- <INVENTORS> BOUDEWIJN A C; NOPPERT T|

NC- 015|

NP- 003|

199510 B

199510

PN- NL 9301181 A 19950201 NL 931181 A 19930705 A61M-025/16 PN- EP 637453 A1 19950208 EP 94201655 A 19940609 A61M-025/00 PN- US 5713851 A 19980203 US 94269001 A 19940630 A61B-017/22 <AN> US 95574584 A 19951214|

AN- <LOCAL> NL 931181 A 19930705; EP 94201655 A 19940609; US 94269001 A 19940630; US 95574584 A 19951214|

AN- <PR> NL 931181 A 19930705|

CT- DE 3239032; FR 2530958; US 41002461

FD- EP 637453

<DS> (Regional): AT BE CH DE DK ES FR GB IE IT LI NL PT SE

US 942690011 FD- US 5713851 A Cont of

LA- NL 9301181(11); EP 637453(E < PG > 7); US 5713851(7)|

DS- <REGIONAL> AT; BE; CH; DE; DK; ES; FR; GB; IE; IT; LI; NL; PT; SE!

AB- <BASIC> NL 9301181 A

The catheter (1) has an inner thin walled tube or lumen (5), inside a hollow base tube (2). The inner lumen delivers liquid under pressure to the distal end (3) of the catheter, where it dislodges particles of the clot from the blood vessel wall. The loosened particles are sucked into the outer low pressure lumen (6) via an opening (4) near the

The catheter is produced by extruding the outer body (2) around the preformed inner tube (5). As the body is extruded, the inner tube is drawn off a supply reel at the rear of the extrusion mechanism.

USE - In surgical operations to relieve cardiovascular thrombosis. Simple manufacturing method to produce a reliable product. Dwg.1/7| AB- <US> US 5713851 A The catheter (1) has an inner thin walled tube or lumen (5), inside a hollow base tube (2). The inner lumen delivers liquid under pressure to the distal end (3) of the catheter, where it dislodges particles of the clot from the blood vessel wall. The loosened particles are sucked into the outer low pressure lumen (6) via an opening (4) near the distal end. The catheter is produced by extruding the outer body (2) around the preformed inner tube (5). As the body is extruded, the inner tube is drawn off a supply reel at the rear of the extrusion mechanism. USE - In surgical operations to relieve cardiovascular thrombosis. Simple manufacturing method to produce a reliable product. Dwg.8/81 DE- <TITLE TERMS> CATHETER; REMOVE; CLOT; PATIENT; BLOOD; VESSEL; INNER; HIGH; PRESSURE; LUMEN; LOW; PRESSURE; LUMEN; PRODUCE; EXTRUDE; MECHANISMI DE- <ADDITIONAL WORDS> HYDROTHROMBECTOMY| DC- P31; P34| IC- <MAIN> A61B-017/22; A61M-025/00; A61M-025/16| FS- EngPI|| 12/4/5 (Item 5 from file: 351) DIALOG(R) File 351: DERWENT WPI (c)1999 Derwent Info Ltd. All rts. reserv.

IM- *Image available*
AA- 95-005660/199501|
XR- <XRPX> N95-004739|

TI- Catheter for removal of atherosclerosis from blood vessel walls - include body having ridged tip and flexible segment remote front tip, with cutter disposed in circumferential gap between tip and flexible segment|

PA- RYAN W J (RYAN-I) | AU- <INVENTORS> RYAN W J | NC- 001 | NP- 001 |

PN- US 5366463 A 19941122 US 90518017 A 19900502 A61B-017/32 199501 B <AN> US 92896736 A 19920609 <AN> US 9327221 A 19930305|

AN- <LOCAL> US 90518017 A 19900502; US 92896736 A 19920609; US 9327221 A 19930305|

AN- <PR> US 9327221 A 19930305; US 90518017 A 19900502; US 92896736 A 19920609|

FD- US 5366463 A Cont of US 90518017 CIP of US 92896736

LA- US 5366463(12)|

AB- <BASIC> US 5366463 A

The catheter comprises a hollow catheter body mounted on a guide wire. The guide wire and catheter body is insertable into a vessel from which atherosclerosis is to be removed. The body comprises a ridged tip and a flexible segment remote from the tip. The flexible segment being attached to the tip such that a circumferential gap is provided in the body between the tip and the flexible segment.

There is a cutting member operatively disposed in the circumferential gap such that manipulation of the body may cause the cutting member to remove atherosclerosis from the interior of the vessel and to direct the removed atherosclerosis to the hollow catheter body for disposal the guide wire extends through the tip and the segment, and the segment is attached to the tip by integral brace the cutting member is being mounted to the tip by the internal brace.

USE/ADVANTAGE - An atherectomy catheter for the removal of atherosclerosis, thrombosis, cholesterol deposits, fatty nodules, and other such sclerotic material from within the blood vessels of a patient. Has no moving parts, and the undesirable material is shaved

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from the entire inside diameter of the vessel and captured and removed
    by the application of negative pressure as the catheter is
    withdrawn along a longitudinal segment of the vessel.
        Dwg.1/61
DE- <TITLE TERMS> CATHETER; REMOVE; ATHEROSCLEROSIS; BLOOD; VESSEL; WALL;
    BODY; RIDGE; TIP; FLEXIBLE; SEGMENT; REMOTE; FRONT; TIP; CUT;
    DISPOSABLE; CIRCUMFERENCE; GAP; TIP; FLEXIBLE; SEGMENT|
DC- P311
IC- <MAIN> A61B-017/32!
FS- EngPI||
 12/4/6
            (Item 6 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
IM- *Image available*
AA- 93-098850/199312|
XR- <XRAM> C93-043870|
TI- General purpose hydraulic filter - body with cover has filter element
    making liq.-filtrate spaces, lengthwise grooves are used to send
    filtrate to removal pipe|
PA- SAMAR AVIAT INST (SAMA-R) |
AU- <INVENTORS> GIMADIEV A G; KRYUCHKOV A N; SHAKHMATOV E V|
NC- 001|
NP- 001|
PN- SU 1725964 A1 19920415 SU 4806232 A 19900326 B01D-027/08
                                                                   199312 B
AN- <LOCAL> SU 4806232 A 19900326|
AN- <PR> SU 4806232 A 19900326
LA- SU 1725964(3)|
AB- <BASIC> SU 1725964 A
        Body (1) has cover (2), filter element (3) forming spaces (4, 5)
    for original liquid and filtrate, feeding/removal pipes (6, 7), and
    support framework for filter-element. Also included are capillary tube
    (8), throttle valve (9) and, bush (10) with screw-channel (11) in
    original liquid space (4) around filter-element, exit connecting with
    space (4), inlet with feed-pipe and, via valve (9), with space (4).
    Support framework is hollow container (14) with cylindrical channel
    (15) in wall and lengthwise grooves (16) on outer surface.
    Filtrate-space (5) is formed by inner surface of element (3) and
    grooves (16). Inner space of (14) is linked via capillary tube (8) to
    space (5).
         Liquid entering filter via pipe (6) falls into screw channel
    (11) having small hydraulic resistance for constant composite flow,
    allowing almost all liquid to go along channel (11), and very small
    part via throttle-valve (9) into space (4). Filtered liquid enters
    space (5), moves along grooves (16) into removal pipe (7). Screw
    channel (11) presents considerable inertial resistance w.r.t. variable
    composite liquid-flow, giving rise to dynamic pressure difference, to
    push liquid via valve (9). Capillary
                                          tube (8) removes
   bubbles from space inside container (14).
         USE/ADVANTAGE - In machinery building, as hydraulic system for
    different applications. Gives effective damping of liq. oscillations.
    Bul. 14/15.4.92
        Dwg.1/2|
DE- <TITLE TERMS> GENERAL; PURPOSE; HYDRAULIC; FILTER; BODY; COVER; FILTER;
    ELEMENT; LIQUID; FILTER; SPACE; LENGTHWISE; GROOVE; SEND; FILTER;
    REMOVE; PIPE!
DC- J01|
IC- <MAIN> B01D-027/08|
MC- <CPI> J01-F02B|
FS- CPI||
            (Item 7 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
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AA- 91-194049/199127|
XR- <XRPX> N91-148553|
TI- Method of removal of blood clots - uses catheter into which saline
    solution is pumped at pressure
PA- RUPPRECHT H (RUPP-I) |
AU- <INVENTORS> RUPPRECHT H J|
NC- 001|
NP- 001|
PN- DE 3941949 A 19910627 DE 3941949 A 19891220
                                                                        199127 B
AN- <LOCAL> DE 3941949 A 19891220|
AN- <PR> DE 3941949 A 19891220|
AB- <BASIC> DE 3941949 A
        The method is for removing a blood clot or embolism by using a
   catheter . The catheter is inserted into the affected blood vessel
  and then filled with a saline solution. The saline solution is pumped
    under pressure into the catheter which has a nozzle at its distal
    end.
         The nozzle has holes arranged in the form of a spiral so that the
    saline solution is sprayed onto the clot. The catheter may be fitted
    with a guide wire which can be moved in the longitudinal direction.
         USE - Removal of blood clots. (2pp Dwg.No.0/0|
DE- <TITLE TERMS> METHOD; REMOVE; BLOOD; CLOT; CATHETER; SALINE; SOLUTION;
    PUMP; PRESSURE|
DC- P31; P34|
IC- <ADDITIONAL> A61B-017/22; A61M-025/00|
FS- EngPI||
 12/4/8
             (Item 8 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
AA- 87-229546/198733|
XR- <XRPX> N87-171836|
TI- Hydraulic device eliminating organic deposits obstructing human ducts -
    has nozzle diameter and liquid pressure giving high jet speeds!
PA- NERACHER A (NERA-I) |
AU- <INVENTORS> NERACHER A
NC- 0151
NP- 0081
               A
A
A
B
                A 19870819 EP 86810616 A 19861231
PN- EP 232678
                                                                        198733 B
PN- CH 667996
                    19881130
                                                                        198850
PN- CH 670947
                    19890731
                                                                        198934
PN- EP 232678
                    19910403
                                                                        199114
PN- EP 232678 B
PN- CA 1281968 C
PN- DE 3678557 G
PN- ES 2022148 B
PN- US 5135482 A
                    19910326
                                                                        199117
                    19910508
                                                                        199120
                    19911201
                                                                        199202
                    19920804 US 86947619 A 19861230 A61B-017/22
                                                                        199234
    <AN> US 88165374 A 19880229
<AN> US 89363620 A 19890608|
AN- <LOCAL> EP 86810616 A 19861231; US 86947619 A 19861230; US 88165374 A
    19880229; US 89363620 A 198906081
AN- <PR> CH 863466 A 19860830; CH 8655 A 19860113; CH 8555 A 19851231|
CT- A3...8747; CH 587044; DE 3337258; DE 3421390; EP 147192; No-SR.Pub; US
    2688968; US 2982582; US 4331422|
FD- EP 232678
    <DS> (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE
FD- EP 232678
    <DS> (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE
FD- US 5135482 A Cont of
                                       US 86947619
                                  US 88165374|
                Cont of
LA- EP 232678 (F<PG> 13); US 5135482(12) |
DS- <REGIONAL> AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE|
AB- <BASIC> EP 232678 A
        The device uses a jet of liquid to clear the duct e.g. arteries. It
    comprises a catheter comprising a flexible pipe introduced into the
```

(

obstructed duct. a flexible metal conduit extends in the pipe and one pipe end has a nozzle induced to the deposit zone. It is connected at its other end to a pressurised liq. source.

The nozzle orifice has a diameter of between 20 and 70 micron and the liq. pressure in the jet is at least 60 MPa. The jet penetrates into the organic liquid contained in the duct (A) at a speed of at least 300 m/s.

ADVANTAGE - Only a fine incision is needed in the human duct. 2/15

AB- <EP> EP 232678 B

The device uses a jet of liquid to clear the duct e.g. arteries. It comprises a catheter comprising a flexible pipe introduced into the obstructed duct. a flexible metal conduit extends in the pipe and one pipe end has a nozzle induced to the deposit zone. It is connected at its other end to a pressurised liq. source.

The nozzle orifice has a diameter of between 20 and 70 micron and the liq. pressure in the jet is at least 60 MPa. The jet penetrates into the organic liquid contained in the duct (A) at a speed of at least 300m/s.

ADVANTAGE - Only a fine incision is needed in the human duct. (13pp Dwg.No $2/15)\mid$

AB- <US> US 5135482 A

The device uses a supersonic microjet liquid flow for canalizing the organic deposit **obstruction** to be **removed**. The device has a bendable **tube** insertable into a **blood vessel** in which an obstruction is to be removed. Within the **tube** extends a **pressure** resistant duct having an outlet or nozzle orifice developed in it by a liquid under **pressure** provided from a pump.

A small collapsible balloon, when inflated, centres the outlet and isolates a volume within the blood vessel upstream of the outlet for containing the microjet fluid and matter from the obstruction eroded and abraded from the deposit during canalising. The volume is evacuated by a suction on the tube taken by a pump and the small balloon is inflated through the bendable tube with which it communicates.

USE - A device for removal of organic deposit obstructions in blood vessels|

DE- <TITLE TERMS> HYDRAULIC; DEVICE; ELIMINATE; ORGANIC; DEPOSIT; OBSTRUCT; HUMAN; DUCT; NOZZLE; DIAMETER; LIQUID; PRESSURE; HIGH; JET; SPEED|

DC- P31; P34|

IC- <MAIN> A61B-017/22|

IC- <ADDITIONAL> A61M-025/00|

FS- EngPI||

12/4/9 (Item 9 from file: 351)

DIALOG(R) File 351: DERWENT WPI

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AA- 87-130292/198719|
```

XR- <XRPX> N87-097447|

TI- Surgical appliance for treating thrombosis - consists of sleeve divided into compartments which are pressurised in sequence|

PA- FA BOSL A (BOSL-N) |

AU- <INVENTORS> BOSL J|

NC- 001|

NP- 001|

PN- DE 3633937 A 19870507 DE 3633937 A 19861004

198719 B

AN- <LOCAL> DE 3633937 A 19861004|

AN- <PR> DE 85U30876 U 19851031|

LA- DE 3633937(5)|

AB- <BASIC> DE 3633937 A

An appliance for **removing** a **thrombosis** from a patient's leg consists of a sleeve (2) made of elastic material and divided into a number of toroidal compartments. The compartments are interconnected by a small passageway in the vertical seam of the sleeve. The sleeve is placed around the patient's leg and the compartments are inflated in sequence from the ankle towards the knee. The **pressure** exerted on the

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leg drives the thrombosis upwards to a previously made opening in the
   vein in the upper part of the leg.
        USE - Treatment of thrombosis.
        2/51
DE- <TITLE TERMS> SURGICAL; APPLIANCE; TREAT; THROMBOSIS; CONSIST; SLEEVE;
    DIVIDE; COMPARTMENT; PRESSURISED; SEQUENCE
IC- <ADDITIONAL> A61H-009/00|
FS- EngPI||
 12/4/10
             (Item 10 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
AA- 86-082939/1986131
XR- <XRPX> N86-060624|
TI- Thrombus
              removing appts. from blood vessels - has catheter
    with suction and pressure duct, with latter opening in suction duct
    nozzle|
PA- VELTRUP E M (VELT-I) |
AU- <INVENTORS> VELTRUP E|
NC- 012|
NP- 004|
                A 19860326 EP 85109361 A 19850725
PN- EP 175096
                                                                    198613 B
PN- US 4690672 A
                   19870901 US 86921872 A 19861021
                                                                    198737
PN- EP 175096 B 19881207
PN- DE 3566612 G 19890112
                                                                    198849
                                                                    198904|
AN- <LOCAL> EP 85109361 A 19850725; US 86921872 A 19861021|
AN- <PR> DE 84U26270 U 198409061
CT- DE 2230283; DE 2447513; DE 3029042; US 3542031|
FD- EP 175096
               Α
    <DS> (Regional): AT BE CH DE FR GB IT LI LU NL SE
FD- EP 175096
    <DS> (Regional): AT BE CH DE FR GB IT LI LU NL SE|
LA- EP 175096(G<PG> 12); EP 175096(G)|
DS- <REGIONAL> AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE|
AB- <BASIC> EP 175096 B
        Thrombi or deposits or kidney and bladder concretions are removed
    by an appts. with a catheter (1) which has a suction duct (2) and a
    pressure duct (3). The pressure duct terminates in a nozzle (15) which
    is directed into the suction duct.
        The catheter is inserted into the blood vessel, or other organ,
    until the end is close to the thrombus etc. The latter is extracted
    into the suction duct. A pressure medium is then applied to the
    pressure duct to prevent blocking of the suction duct.
        ADVANTAGE - Complete removal of depositions and concretions. (12pp
    Dwg.No.2/3) |
AB- <EP> EP 175096 B
        Apparatus for the removal of solid bodies or deposits from body
    vessels, comprising a catheter (1) having a suction duct (2) and a
    pressure duct (3), which opens out, in the region of the opening (13)
    of the suction duct (2), into a nozzle (15) which is directed into the
    suction duct (2) and essentially parallel to the axis of the suction
    duct (2), characterised in that the pressure duct (3) is extended at
    the free end of the catheter (1) over the opening (13) of the suction
    duct (2) by a tongue (14) having the nozzle (15), in that the nozzle
    (15) is arranged in front of the opening (13) of the suction duct (2)
    and in that both ducts (2,3) are connected to one another by
    nozzle-like openings (17) which are arranged such that the jets
    emerging from the pressure duct into the suction duct assist transport
    in the suction duct (2). (5pp) |
AB- <US> US 4690672 A
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A catheter is open at an end adapted to be fed into a passage of a human body and connected to a suction source in communication with a suction passage of this catheter. The catheter is provided with a pressure passage as well which is connected to a fluid-pressure source and which terminates in a nozzle at the end of the catheter. The nozzle

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is oriented to direct a jet into the mouth of the suction passage.
        For the removal of a blood thrombus, for example, the catheter may
    be inserted through a vein or other vasculature passage to the site at
    which the thrombus is located. By manipulation of the catheter, the
    thrombus can be brought into juxtaposition with the mouth of the
    suction and, at least in part, between this nozzle and the mouth of the
    suction passage. (5pp)n|
DE- <TITLE TERMS> THROMBUS; REMOVE; APPARATUS; BLOOD; VESSEL; CATHETER;
    SUCTION; PRESSURE; DUCT; LATTER; OPEN; SUCTION; DUCT; NOZZLE|
DC- P31; P34|
IC- <ADDITIONAL> A61B-017/22; A61M-001/00; A61M-003/00|
FS- EngPI||
 12/4/11
             (Item 11 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
AA- 85-115086/198519|
XR- <XRPX> N85-086369|
TI- Ileofemoral venous thrombosis therapy - by placing limb in
    pneumo-sleeve connected to electropneumatic system for sectional
    pressurisation|
PA- KIEV CLINICAL SURGE (KICL-R) |
AU- <INVENTORS> MIKHNO V M; SAVENKO A G; SUKHAREV I I!
NC- 001|
NP- 001|
PN- SU 1119681 A 19841023 SU 3430621 A 19820427
                                                                   198519 B
AN- <LOCAL> SU 3430621 A 19820427|
AN- <PR> SU 3430621 A 19820427|
LA- SU 1119681(3)|
AB- <BASIC> SU 1119681 A
        Main vein thrombosis therapy by surgical intervention to create a
    venotomic hole and remove the thrombus, is performed by placing the
    affected limb in a pneumo-sleeve (1) connected to an electropneumatic
    system (3). For 8-10 seconds each section is pressurised, the press.
    increasing by 10-15 mmHg section by section as from the foot. The
    press. in the first section is 70-100 mm Hg greater than initial venous
    pressure .
        After constricting the common femoral vein above the thrombus, the
    venotomic hole is may be a 1-2cm incision below the constriction. The
    press. is measured in the deep veins below the thrombus. The
    first-section press. is set by the press. regulators (4) and setters
    (5). The switch to the following sections is timed by a time mark
    sensor (11).
        USE/ADVANTAGE - In the context of surgical management of
    ileofemoral venous thrombosis, provision is made to prevent traumatism
    and complications. No foreign body is introduced into the venous main
    to force the thrombus towards the venotomic hole Bul. 39/23.10.84. (3pp
    Dwg.No.1/1|
DE- <TITLE TERMS> VEIN; THROMBOSIS; THERAPEUTIC; PLACE; LIMB; PNEUMO;
    SLEEVE; CONNECT; ELECTROPNEUMATIC; SYSTEM; SECTION; PRESSURISED
DC- P31; S05|
IC- <ADDITIONAL> A61B-017/00|
MC- <EPI> S05-A09; S05-B|
FS- EPI; EngPI||
             (Item 12 from file: 351)
 12/4/12
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
AA- 81-K6746D/198141|
TI- Cutting annulus for removal of arterial occlusion - comprises annular
    knife with overlapping sidewalls permitting radial compression and
    central wire carrier to permit movement of knife!
PA- FOGARTY T J (FOGA-I) |
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AU- <INVENTORS> CHIN A KI
NC- 001|
NP- 001|
PN- US 4290427 A 19810922
                                                                    198141 B
AN- <PR> US 7997206 A 19791126; US 81273920 A 198106151
LA- US 4290427(5) I
AB- <BASIC> US 4290427 A
        The endarterectomy instrument comprises an annular knife having a
    cutting edge at one end. The knife is split longitudinally and has
    overlapped end portions to enable the knife to be compressible radially
    for insertion within an artery. The knife applies a constant outwardly
    directed pressure against the artery as an arteriosclerotic
   occlusion is being excised .
        A wire carrier is attached so the knife may be moved along an
    occluded artery to excise the occlusion. The cutting edge is located at
    the end of the knife from which the wire carrier extends.
DE- <TITLE TERMS> CUT; ANNULAR; REMOVE; ARTERY; OCCLUDE; COMPRISE; ANNULAR;
    KNIFE; OVERLAP; SIDEWALL; PERMIT; RADIAL; COMPRESS; CENTRAL; WIRE;
    CARRY; PERMIT; MOVEMENT; KNIFE|
DE- <ADDITIONAL WORDS> ARTERY; SCLEROSIS|
DC- P31|
IC- <ADDITIONAL> A61B-017/32|
FS- EngPI||
             (Item 13 from file: 351)
 12/4/13
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
AA- 73-10381U/197308|
TI- Fibrous material impregnation - hydrodynamic cavitation field improves
    accelerates impregnation process!
PA- CELLULOSE-PAPER IND RES I (CEL -N) |
NC- 001|
NP- 001|
PN- SU 339612
                                                                    197308 B
AN- <PR> SU 1601795 A 197012181
AB- <BASIC> SU 339612 A
        The impregnation is carried out by mixing the fibres with solution
    of chemical reagents, the cavitation bubbles causing opening of the
    fibres and the removal of air bubbles from the capillaries .
    This results in the break up of the outside surface in the fibres and
    ensures fast and complete impregnation. The mixture is held in a
    reactor at a pressure of 40 m water column and with a flow of over 14
   m/sec.|
DE- <TITLE TERMS> FIBRE; MATERIAL; IMPREGNATE; HYDRODYNAMIC; CAVITATE;
    FIELD; IMPROVE; ACCELERATE; IMPREGNATE; PROCESS!
IC- <ADDITIONAL> D21D-003/00|
MC- <CPI> F05-A03|
FS- CPIII
             (Item 1 from file: 347)
 12/4/14
FN- DIALOG(R) File 347: JAPIO
CZ- (c) 1999 JPO & JAPIO. All rts. reserv.
TI- CATHETER FOR REMOVING PORRIDGE-LIKE THROMBUS
PN- 08-038611 -JP 8038611 A-
PD- February 13, 1996 (19960213)
AU- SOEJIMA HIDEHISA
PA- NISSHO CORP [470126] (A Japanese Company or Corporation), JP (Japan)
AN- 06-197371 -JP 94197371-
AD- July 29, 1994 (19940729)
IC- -6- A61M-025/00; A61B-017/00
CL- 28.2 (SANITATION -- Medical)
```

AB- PURPOSE: To make it possible to remove the porridge-like thrombus in a blood vessel without losing much blood by providing the above catheter with a first catheter which is closed at the front end has a first balloon and a second catheter which has a second balloon disposed at the outside wall of the vessel parted from the position of the first balloon and is movable forward and backward.

CONSTITUTION: The front end 4 of the catheter is introduced into the blood vessel from the downstream side in the blood vessel in the state of shrinking the first and second balloons 2, 3 and the second balloon 3 is arranged in the thrombus position in the case of removing of the porridge-like thrombus. Pressurized fluid is then introduced from a first inflow port 10 of the first catheter 7 communicated with the first balloon 2 extending from the rear end of the catheter to expand the first balloon 2 and to shut off the blood. The pressurized fluid is thereafter introduced from a second pressurized fluid introducing pipe 6 communicated with the second balloon 3 into the second balloon 3 to expand this balloon and to move the second catheter 8 backward, by which the second balloon 3 is slid on the inside wall of the blood vessel and the porridge-like thrombus is removed.

12/4/15 (Item 2 from file: 347)

FN- DIALOG(R) File 347: JAPIO

CZ- (c) 1999 JPO & JAPIO. All rts. reserv.

TI- LASER PROBE

PN- 04-221546 -JP 4221546 A-

PD- August 12, 1992 (19920812)

AU- MASUBUCHI RYOJI; YOSHIMOTO YOUSUKE; HATORI TSURUO; MATSUNO KIYOTAKA; HASEGAWA AKIRA; YOSHIHARA MASAYA; KURAMOTO SEIJI; NAKAMURA TAKEAKI; HAGINO TADAO

PA- OLYMPUS OPTICAL CO LTD [000037] (A Japanese Company or Corporation), JP (Japan)

AN- 02-406036 -JP 90406036-

AD- December 25, 1990 (19901225)

IC- -5- A61B-017/36; A61B-017/00; A61N-005/06

CL- 28.2 (SANITATION -- Medical)

KW- R002 (LASERS)

SO- Section: C, Section No. 1009, Vol. 16, No. 566, Pg. 123, December 08, 1992 (19921208)

AB- PURPOSE: To simply and rapidly remove a thrombus part and to perform an enlargement after removal thereof by providing a catheter having a balloon around the outer periphery of its front end part, and a laser guide having, at its front end, a blocking part for blocking the front end opening of the catheter.

CONSTITUTION: When a thrombus part is removed from a blood vessel with a use of laser probe, a catheter tube 1 is inserted into the vessel, and a laser guide 5 is inserted into the tube 1 so as to position the front end thereof at the front end opening of the tube 1. Then laser L is irradiated so as to remove the thrombus part. Next, the laser guide 5 is moved toward the front end part of the tube 1, and when a center hole in a front end member 3 is blocked by a blocking part 6 provided in the front end part of the laser guide 5, liquid fed into the tube 1 is pooled so as to inflate the balloon 4 provided around the outer periphery of the end part of the tube 4, by a fluid pressure. Accordingly, the thrombus part may be enlarged, and accordingly, the removal of the thrombus part and the enlargement thereof can be made by only one catheter.

12/4/16 (Item 3 from file: 347)

FN- DIALOG(R) File 347: JAPIO|

CZ- (c) 1999 JPO & JAPIO. All rts. reserv.

TI- WATER JET OPERATING APPARATUS

PN- 03-047247 -JP 3047247 A-

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PD- February 28, 1991 (19910228)
```

- AU- NISHISAKA TAKESHI
- PA- NISHISAKA TAKESHI [000000] (An Individual), JP (Japan)
- AN- 01-128030 -JP 89128030-
- AD- May 22, 1989 (19890522)
- IC- -5- A61B-017/32; A61B-017/32
- CL- 28.2 (SANITATION -- Medical)
- SO- Section: C, Section No. 831, Vol. 15, No. 189, Pg. 75, May 15, 1991 (19910515)
- AB- PURPOSE: To obtain an inexpensive and ultrasmall constitution of a nozzle by constituting monolithically a pressure tube generating an injected jet flow at an apex part, a pump tube connected with a catheter, a tube connected therewith, an air trap and a bottle needle.

CONSTITUTION: A water jet operating apparatus 1 consists of a pump tube 4 connected with a pressure tube 3, a tube 5 connected with the pump tube 4, an air trap 6 connected with the tube 5 and a bottle needle 7 connected with the air trap 6 and these are monolithically constituted. It is possible thereby to perform cutting, incision, resection of internal organs, removal of an occlusion in a blood vessel, etc., by means of a simple method and when cutting system is nt desirable, it is possible to obtain such an advantage that washing a wound can be performed with a low pressure water flow.

Patent Family:

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13/3,K/1
               (Item 1 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
             **Image available**
012229871
WPI Acc No: 99-035978/199904
XRPX Acc No: N99-027000
 Bulbous line-activated catheter insert - is activated by line
 temporarily blocking vein or artery during procedure to remove
         vessel
                   blockages, preventing thrombosis
Patent Assignee: SHERINE MED AG (SHER-N)
Inventor: REDHA F
Number of Countries: 082 Number of Patents: 003
Patent Family:
                        Applicat No Kind Date
Patent No Kind Date
                                                    Main IPC
                                                                   Week
DE 19723700 A1 19981210 DE 1023700 A 19970606 F16L-055/12 WO 9855045 A1 19981210 WO 98EP3353 A 19980604 A61F-002/00 AU 9886247 A 19981221 AU 9886247 A 19980604 A61F-002/00
                                                                   199904 B
                                                                   199904
                                                                   199919
Priority Applications (No Type Date): DE 1023700 A 19970606
Filing Details:
          Kind Filing Notes
                                  Application Patent
Patent
WO 9855045 A1
   Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU
   CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR
   LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
   TR TT UA UG US UZ VN YU ZW
   Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
   IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
AU 9886247 A Based on
                                                WO 9855045
Language, Pages: DE 19723700 (6); WO 9855045 (G)
 Bulbous line-activated catheter insert...
...is activated by line temporarily blocking vein or artery during
 procedure to remove
                         blood vessel
                                          blockages, preventing thrombosis
... Abstract (Basic): The catheter is inserted during a medical procedure to
    remove obstructions from the walls of especially human veins or
   arteries (12). The vein , artery or other passage is temporarily
closed by expansion of a bulbous insert (16...
International Patent Class (Additional): A61B-017/12 ...
...A61M-025/00 ...
...A61M-031/00
 13/3,K/2
               (Item 2 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
012177857
             **Image available**
WPI Acc No: 98-594768/199850
Related WPI Acc No: 98-594771
XRAM Acc No: C98-178493
XRPX Acc No: N98-462763
   Removing blood clot from blood vessel, particularly in brain,
 using light delivery catheter - with short tapered section connecting
 proximal and distal shafts and single lumen in distal shaft alignable
 with either lumen of proximal shaft containing guide-wire and light guide
 respectively
Patent Assignee: LATIS INC (LATI-N)
Inventor: GREGORY K W; PORTER C H; RYDELL M A; ZIEBOL R
Number of Countries: 081 Number of Patents: 002
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Applicat No Kind Date
Patent No Kind Date
                                               Main IPC
                                                              Week
WO 9848882 A1 19981105 WO 98US8836 A 19980430 A61M-025/00
                                                              199850 B
AU 9872745 A 19981124 AU 9872745 A 19980430 A61M-025/00
                                                              199914
Priority Applications (No Type Date): US 97846426 A 19970430
Filing Details:
Patent
        Kind Filing Notes
                               Application Patent
WO 9848882 A1
   Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU
   CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR
   LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
   TR TT UA UG UZ VN YU ZW
   Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
   IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
AU 9872745 A Based on
                                            WO 9848882
Language, Pages: WO 9848882 (E, 20)
   Removing blood clot from blood
                                     vessel, particularly in brain,
using light delivery catheter -
...A61M-025/00
... Abstract (Basic): USE - Removing a blood clot from a blood
    , particularly in the brain, using a light delivery catheter (claimed
International Patent Class (Main): A61M-025/00
International Patent Class (Additional): A61M-031/00
13/3, K/3
              (Item 3 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
012078650
            **Image available**
WPI Acc No: 98-495561/199842
Related WPI Acc No: 98-018243; 98-018245; 98-018246; 98-495477; 98-495478;
  98-495558
XRAM Acc No: C98-149252
XRPX Acc No: N98-387080
Aspiration catheter for removing
                                     occlusions in saphenous vein
grafts - has aspiration port connected to proximal end of main lumen and
distal end tip made of more flexible material than rest of catheter
Patent Assignee: PERCUSURGE INC (PERC-N)
Inventor: BAGAOISAN C J; BLEAM J C; HA H V; KIM I J; LAM S; MUNI K P; PATEL
 M R; ZADNO-AZIZI G
Number of Countries: 081 Number of Patents: 003
Patent Family:
Patent No Kind Date Applicat No Kind Date
                                                Main IPC
WO 9839047 A1 19980911 WO 98US4494 A 19980306 A61M-025/00
                                                              199842 B
US 5833644 A 19981110 US 96650464 A 19960520 A61M-031/00
                                                              199901
                       US 97812875 A 19970306
AU 9863477 A 19980922 AU 9863477
                                   A 19980306 A61M-025/00
                                                              199908
Priority Applications (No Type Date): US 9826013 A 19980219; US 97812875 A
  19970306; US 97813807 A 19970306; US 97813808 A 19970306; US 96650464 A
  19960520
Filing Details:
Patent
         Kind Filing Notes
                               Application Patent
WO 9839047 A1
   Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU
   CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
  TR TT UA UG UZ VN YU ZW
   Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GM GR IE
   IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
                               US 96650464
US 5833644 A CIP of
AU 9863477 A Based on
                                            WO 9839047
Language, Pages: WO 9839047 (E, 35)
Aspiration catheter for removing
                                     occlusions in saphenous vein
grafts...
```

... of main lumen and distal end tip made of more flexible material than rest of catheter body ...A61M-031/00 International Patent Class (Main): A61M-025/00A61M-031/00 International Patent Class (Additional): A61M-025/10 13/3,K/4 (Item 4 from file: 351) DIALOG(R) File 351: DERWENT WPI (c)1999 Derwent Info Ltd. All rts. reserv. 012078567 **Image available** WPI Acc No: 98-495478/199842 Related WPI Acc No: 98-018243; 98-018245; 98-018246; 98-495477; 98-495558; 98-495561 XRAM Acc No: C98-149191 XRPX Acc No: N98-387040 Method of removing thrombus, embolism or other obstructions in carotid artery - using main and inner catheter that have occlusion device and therapy catheter for entering between to allow aspiration Patent Assignee: PERCUSURGE INC (PERC-N) Inventor: BAGAOISAN C J; MUNI K P; PATEL M; ZADNO-AZIZI G Number of Countries: 080 Number of Patents: 002 Patent Family: Patent No Kind Date Applicat No Kind Date Main IPC WO 9838930 A1 19980911 WO 98US4417 A 19980306 A61B-017/22 199842 B AU 9864501 A 19980922 AU 9864501 A 19980306 A61B-017/22 199908 Priority Applications (No Type Date): US 97933816 A 19970919; US 97813808 A 19970306 Filing Details: Patent Kind Filing Notes Application Patent WO 9838930 A1 Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW AU 9864501 A Based on WO 9838930 Language, Pages: WO 9838930 (E, 40) Method of removing thrombus, embolism or other obstructions in carotid artery -using main and inner catheter that have occlusion device and therapy catheter for entering between to allow aspiration ...A61B-017/22 ... Abstract (Basic): catheter (420) that each have an occlusion device (408, 422), a therapy catheter and an aspiration catheter. An occlusion (410) in a carotid artery is treated by using main and inner catheters as above to install occlusion devices on either side of the occlusion to define a working area. A therapy catheter then enters the area to treat the occlusion and subsequently removed . In different aspects: (1) The occlusion device on the main catheter which is on the proximal side of the occlusion is deactivated so blood can flow into the area and the area aspirated through the main catheter or an aspiration catheter; (2) An intermediate catheter aspirates the area to remove particles and debris; (3) An internal carotid artery is treated as in (2) and an occlusion device on a

International Patent Class (Main): A61B-017/22
International Patent Class (Additional): A61M-025/00

angioplasty catheter .

second inner catheter is installed before the therapy catheter enters; (4) As (2) where the therapy catheter is a balloon

(Item 5 from file: 351) 13/3,K/5

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

Image available 012078566

WPI Acc No: 98-495477/199842

Related WPI Acc No: 98-018243; 98-018245; 98-018246; 98-495478; 98-495558;

98-495561

XRPX Acc No: N98-387039

Intravascular aspiration system - has kit with selection of catheters used to create space in the area of an occlusion, treat the occlusion and remove any debris released and aspirate the blood

Patent Assignee: PERCUSURGE INC (PERC-N)

Inventor: MUNI K P; ZADNO-AZIZI G

Number of Countries: 080 Number of Patents: 002

Patent Family:

Patent ramily.

Patent No Kind Date Applicat No Kind Date Main 110

WO 9838929 A1 19980911 WO 98US4366 A 19980306 A61B-017/22

19980922 AU 9866883 A 19980306 A61B-017/22 Week 199842 B 199908

Priority Applications (No Type Date): US 97813807 A 19970306 Filing Details:

Patent Kind Filing Notes Application Patent

WO 9838929 A1

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9866883 A Based on

WO 9838929

Language, Pages: WO 9838929 (E, 26)

- ... has kit with selection of catheters used to create space in the area of an occlusion, treat the occlusion and remove any debris released and aspirate the blood vessel ...A61B-017/22
- ... Abstract (Basic): Each catheter is capable of independent manipulation within the **blood** vessel during treatment. The catheter fitted with the occlusive head has a long tubular body, an inflatable balloon mounted at ...
- ...on a core wire and joined to the far end of the tubular body. The catheter kit is suitable for the removal of occlusions from saphenous vein grafts, the coronary and carotid arteries , arteries above the aortic arch and vessels of similar size and pressure... International Patent Class (Main): A61B-017/22 International Patent Class (Additional): A61M-025/00

13/3,K/6 (Item 6 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c) 1999 Derwent Info Ltd. All rts. reserv.

011969907 **Image available**

WPI Acc No: 98-386817/199833

XRPX Acc No: N98-301695

clots in blood vessels - has both Catheter for removing delivery and receiving catheter with inflatable balloons that form receptacles when inflated

Patent Assignee: NAKHJAVAN F K (NAKH-I)

Inventor: NAKHJAVAN F K

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week US 5772674 A 19980630 US 97829381 A 19970331 A61B-017/22 199833 B

Priority Applications (No Type Date): US 97829381 A 19970331 Language, Pages: US 5772674 (10) Catheter for removing clots in blood vessels - has both delivery and receiving catheter with inflatable balloons that form receptacles when inflated International Patent Class (Main): A61B-017/22 13/3,K/7 (Item 7 from file: 351) DIALOG(R) File 351: DERWENT WPI (c)1999 Derwent Info Ltd. All rts. reserv. 011938457 **Image available** WPI Acc No: 98-355367/199831 XRPX Acc No: N98-278397 Catheter used in e.g. crown introarterial angiography - has slope in inner periphery of bottom curve formed to main curve on one end of catheter tube Patent Assignee: MIYOSHI K (MIYO-I); TANAKA J (TANA-I) Number of Countries: 001 Number of Patents: 001 Patent Family: Patent No Kind Date Applicat No Kind Date Main IPC Week JP 10137341 A 19980526 JP 96300578 A 19961112 A61M-025/00 199831 B Priority Applications (No Type Date): JP 96300578 A 19961112 Language, Pages: JP 10137341 (7) ... Abstract (Basic): USE - E.g. balloon catheter for blood vessel inspection, thrombus removal . International Patent Class (Main): A61M-025/00 (Item 8 from file: 351) 13/3,K/8 DIALOG(R) File 351: DERWENT WPI (c)1999 Derwent Info Ltd. All rts. reserv. 011789539 **Image available** WPI Acc No: 98-206449/199818 Related WPI Acc No: 91-057969; 91-072781; 95-254318 XRPX Acc No: N98-164011 Distal atherectomy catheter for removing obstructions, plaque, stenosis, occlusions etc. from an artery or coronary vessel - has cutter head assembly attached to the distal end of the catheter tube, with rotary cutter mounted within the cutter head assembly and connected to flexible drive Patent Assignee: AMERICAN BIOMED INC (AMBI-N) Inventor: SUMMERS D P Number of Countries: 001 Number of Patents: 001 Patent Family: Patent No Kind Date Applicat No Kind Date Main IPC US 5728129 A 19980317 US 89312737 A 19890217 A61B-017/32
US 89383606 A 19890724
US 92833362 A 19920210
US 92895099 A 19920608
US 95478984 A 19950607 199818 B Priority Applications (No Type Date): US 95478984 A 19950607; US 89312737 A 19890217; US 89383606 A 19890724; US 92833362 A 19920210; US 92895099 A 19920608 Filing Details: Patent Kind Filing Notes Application Patent US 5728129 A CIP of US 89312737 Cont of US 89383606 CIP of US 92833362

US 92895099

CIP of

CIP of US 4994067
Cont of US 5087265
CIP of US 5370651
CIP of US 5431673

Language, Pages: US 5728129 (11)

Distal atherectomy catheter for removing obstructions, plaque, stenosis, occlusions etc. from an artery or coronary vessel...

...has cutter head assembly attached to the distal end of the catheter tube, with rotary cutter mounted within the cutter head assembly and connected to flexible drive

International Patent Class (Main): A61B-017/32

13/3,K/9 (Item 9 from file: 351)
DIALOG(R)File 351:DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

011776430 **Image available**
WPI Acc No: 98-193340/199817

XRAM Acc No: C98-061887 XRPX Acc No: N98-153022

Balloon catheter for removing obstruction, relieving stenotic site, deploying stent or occluding blood vessel - comprises inner balloon in fluid communication with lumen via aperture and outer balloon with part movable relative to inner balloon

Patent Assignee: CRYOLIFE INC (CRYO-N); IDEAS FOR MEDICINE INC (IDEA-N)

Inventor: WRIGHT L A

Number of Countries: 077 Number of Patents: 003

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week
WO 9809670 A2 19980312 WO 97US15476 A 19970903 A61M-000/00 199817 B
AU 9743319 A 19980326 AU 9743319 A 19970903 A61M-025/00 199832
US 5868776 A 19990209 US 96707186 A 19960903 A61M-029/00 199913

Priority Applications (No Type Date): US 96707186 A 19960903 Filing Details:

Patent Kind Filing Notes Application Patent

WO 9809670 A2

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

Designated States (Regional): AT BE CH DE DK ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9743319 A Based on WO 9809670

Language, Pages: WO 9809670 (E, 25)

Balloon catheter for removing obstruction, relieving stenotic site, deploying stent or occluding blood vessel - ...A61M-025/00

International Patent Class (Main): A61M-000/00 ...

...A61M-025/00 ...

...A61M-029/00

13/3,K/10 (Item 10 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

011414723 **Image available**
WPI Acc No: 97-392630/199736

Related WPI Acc No: 87-244276; 91-101041; 94-166183; 94-177897; 97-511472;

99-141429

XRPX Acc No: N97-326872

Patient's blood vessel occlusion treating and imaging - advancing mechanical working element deployed in distal region of catheter body

through selected region of patient's blood vessel and generating second image of occlusion using ultrasonic transducer

Patent Assignee: CARDIOVASCULAR IMAGING SYSTEMS (CARD-N)

Inventor: YOCK P G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week US 5651364 A 19970729 US 86834893 A 19860228 A61B-008/00 199736 B

US 88290533 A 19881223 US 91649048 A 19910201 US 92826260 A 19920124 US 9314906 A 19930201 US 93162412 A 19931203 US 95468003 A 19950606

Priority Applications (No Type Date): US 88290533 A 19881223; US 86834893 A 19860228; US 91649048 A 19910201; US 92826260 A 19920124; US 9314906 A 19930201; US 93162412 A 19931203; US 95468003 A 19950606

Filing Details:

Patent Kind Filing Notes Application Patent US 5651364 A CIP of US 86834893 Cont of US 88290533 Cont of US 91649048 Cont of US 92826260 Div ex US 9314906 Cont of US 93162412 CIP of US 4794931 Cont of US 5000185 Div ex US 5313949

Language, Pages: US 5651364 (12)

...Abstract (Basic): image generating and working element advancing steps are repeated until a set amount of the occlusion has been removed from the selected region of the patient's blood vessel. During operation the working element is stabilised by inflating a balloon affixed to an outer surface of the distal region of the catheter body to urge the distal region of the catheter body against an area of occluding tissue. The mechanical working element has a rotary cutter... International Patent Class (Main): A61B-008/00

13/3,K/11 (Item 11 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

011073812 **Image available**
WPI Acc No: 97-051736/199705

Related WPI Acc No: 95-060200; 96-159590

XRAM Acc No: C97-017057 XRPX Acc No: N97-042557

Removing clot from obstructed blood vessel using low frequency mechanical vibration - applied by catheter with distal end connected to vibration source and also able to deliver medication to site of clot.

Patent Assignee: DUBRUL W R (DUBR-I); EVANS M A (EVAN-I)

Inventor: DUBRUL W R; EVANS M A

Number of Countries: 020 Number of Patents: 004

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week
WO 9639955 Al 19961219 WO 95US13566 A 19951011 A61B-017/32 199705 B
AU 9540064 A 19961230 AU 9540064 A 19951011 A61B-017/32 199716
US 5713848 A 19980203 US 9365470 A 19930519 A61B-017/32 199812

US 94320184 A 19941007 US 95483071 A 19950607

EP 836430 A1 19980422 EP 95938830 A 19951011 A61B-017/32 199820 WO 95US13566 A 19951011

Priority Applications (No Type Date): US 95483071 A 19950607; US 9365470 A 19930519; US 94320184 A 19941007 Filing Details:

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Kind Filing Notes
                              Application Patent
Patent
WO 9639955 A1
   Designated States (National): AU CA JP
   Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL
   PT SE
AU 9540064 A Based on
                                            WO 9639955
US 5713848 A Cont of
                               US 9365470
                               US 94320184
               CIP of
               Cont of
                                            US 5380273
               CIP of
                                            US 5498236
EP 836430
           Al Based on
                                            WO 9639955
   Designated States (Regional): BE DE FR GB IT LU NL
Language, Pages: WO 9639955 (E, 30); US 5713848 (12); EP 836430 (E)
            clot from obstructed
   Removing
                                    blood
                                            vessel using low frequency
 mechanical vibration...
...applied by catheter with distal end connected to vibration source and
 also able to deliver medication to site ...
...A61B-017/32
International Patent Class (Main): A61B-017/32
 13/3,K/12
               (Item 12 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
010807255
            **Image available**
WPI Acc No: 96-304208/199631
XRPX Acc No: N96-255887
                          thrombus in blood vessel - has expansion
   Catheter for removing
 and shrinkage part which is expanded by pulling wire using steering
handle
Patent Assignee: OBAYASHI Y (OBAY-I)
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date Applicat No Kind Date
                                               Main IPC
                                                              Week
JP 8131551 A 19960528 JP 94271278 A 19941104 A61M-025/04
                                                              199631 B
Priority Applications (No Type Date): JP 94271278 A 19941104
Language, Pages: JP 8131551 (5)
   Catheter for removing
                           thrombus in blood
International Patent Class (Main): A61M-025/04
International Patent Class (Additional): A61M-025/00 ...
...A61M-025/01
               (Item 13 from file: 351)
 13/3,K/13
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
010353004
            **Image available**
WPI Acc No: 95-254318/199533
Related WPI Acc No: 91-057969; 91-072781; 98-206449
XRPX Acc No: N95-196359
                                             obstructions, plaque,
 Distal atherectomy catheter for removing
 stenosis and occlusions from artery or coronary vessel - has reciprocal
 rotary cutter head at distal end of catheter rotated at low speed i.e
 2000 rpm for progressively opening lumen of blood vessel and
 entrapping excised material into containment housing
Patent Assignee: AMERICAN BIOMED INC (AMBI-N)
Inventor: BRINSON G L; SUMMERS D P
Number of Countries: 001 Number of Patents: 001
Patent Family:
                       Applicat No Kind Date
Patent No Kind Date
                                                Main IPC
US 5431673 A 19950711 US 89312737 A 19890217 A61B-017/32
                                                              199533 B
                        US 89383606 A 19890724
                        US 92833362 A 19920210
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Priority Applications (No Type Date): US 92895099 A 19920608; US 89312737 A
  19890217; US 89383606 A 19890724; US 92833362 A 19920210
Filing Details:
          Kind Filing Notes
                                   Application Patent
Patent
US 5431673 A CIP of
                                   US 89312737
                 Cont of
                                   US 89383606
                 CIP of
                                   US 92833362
                 CIP of
                                                  US 4994067
                Cont of
                                                  US 5087265
Language, Pages: US 5431673 (10)
 Distal atherectomy catheter for removing obstructions, plaque,
 stenosis and occlusions from artery or coronary vessel...
...has reciprocal rotary cutter head at distal end of catheter rotated at
 low speed i.e 2000 rpm for progressively opening lumen of blood vessel
  and entrapping excised material into containment housing
International Patent Class (Main): A61B-017/32
 13/3,K/14
                 (Item 14 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
010253740
              **Image available**
WPI Acc No: 95-154995/199520
XRPX Acc No: N95-122106
 Support collar for ultrasound catheter - has ultrasound transducer
 connected to transmitter wire by screwed coupling and slidable collar
 that moves over coupling to provide added support
Patent Assignee: ADVANCED CARDIOVASCULAR SYSTEMS INC (ADCA-N); BAXTER INT
  INC (BAXT
Inventor: GESSWEIN D H; MILLS T C; NITA H; TRAN M
Number of Countries: 020 Number of Patents: 004
Patent Family:
Patent No Kind Date
                          Applicat No Kind Date
                                                    Main IPC
                                                                     Week
WO 9509570 A1 19950413 WO 94US10920 A 19940927 A61B-017/22
US 5417672 A 19950523 US 93131065 A 19931004 A61M-025/00
EP 722294 A1 19960724 EP 94929900 A 19940927 A61B-017/22
WO 94US10920 A 19940927
JP 9503145 W 19970331 WO 94US10920 A 19940927 A61B-017/22
JP 95510874 A 19940927
                                                                     199520 B
                                                                     199526
                                                                     199634
                                                                     199723
Priority Applications (No Type Date): US 93131065 A 19931004
Filing Details:
Patent
          Kind Filing Notes
                                   Application Patent
WO 9509570 A1
   Designated States (National): CA JP
   Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL
   PT SE
EP 722294
             Al Based on
                                                 WO 9509570
   Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC
   NL PT SE
                                                 WO 9509570
JP 9503145 W Based on
Language, Pages: WO 9509570 (E, 22); US 5417672 (11); EP 722294 (E, 22); JP
  9503145 (23)
...A61M-025/00
... Abstract (Basic): USE/ADVANTAGE - Coupling ultrasound transducer to
   catheter for ablating and removing obstructive material from
          vessels e.g femoral arteries in e.g angioplasty. Reduces
    stress on ultrasonic connections to minimise likelihood of breakage...
International Patent Class (Main): A61B-017/22 ...
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...A61M-025/00

International Patent Class (Additional): A61B-017/36

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13/3,K/15
                  (Item 15 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
010171933
               **Image available**
WPI Acc No: 95-073186/199510
XRPX Acc No: N95-057981
   Catheter for removing
                               clots from patient's blood
                                                                  vessels - has
 inner high pressure lumen inside low pressure lumen produced by extrusion
Patent Assignee: CORDIS EUROPA NV (CRDC ); CORDIS CORP (CRDC )
Inventor: BOUDEWIJN A C; NOPPERT T
Number of Countries: 015 Number of Patents: 003
Patent Family:
Patent No Kind Date
                            Applicat No Kind Date
                                                        Main IPC
                                                                         Week
NL 9301181 A 19950201 NL 931181 A 19930705 A61M-025/16
EP 637453 A1 19950208 EP 94201655 A 19940609 A61M-025/00
US 5713851 A 19980203 US 94269001 A 19940630 A61B-017/22
US 95574584 A 19951214
                                                                         199510 B
                                                                         199510
                                                                         199812
Priority Applications (No Type Date): NL 931181 A 19930705
Filing Details:
Patent
          Kind Filing Notes
                                     Application Patent
EP 637453
             A1
   Designated States (Regional): AT BE CH DE DK ES FR GB IE IT LI NL PT SE
US 5713851 A Cont of
                                    US 94269001
Language, Pages: NL 9301181 (11); EP 637453 (E, 7); US 5713851 (7)
   Catheter for removing clots from patient's blood vessels -
...A61M-025/00
International Patent Class (Main): A61B-017/22 ...
...A61M-025/00 ...
...A61M-025/16
 13/3,K/16
                 (Item 16 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
010165029
               **Image available**
WPI Acc No: 95-066282/199509
Related WPI Acc No: 92-268354; 93-167326; 93-368326; 94-034688; 95-014004;
  95-014005; 95-074141; 95-154997; 96-370508
XRPX Acc No: N95-052681
 Ultrasound catheter for removing obstructions from blood
  - has ultrasound transmission member extending longitudinally throughout
Patent Assignee: ADVANCED CARDIOVASCULAR SYSTEMS INC (ADCA-N); BAXTER INT
  INC (BAXT
Inventor: MILLS T C; NITA H
Number of Countries: 020 Number of Patents: 004
Patent Family:
Patent No Kind Date
                           Applicat No Kind Date
                                                        Main IPC
                                                                         Week
US 5382228 A 19950117 US 92911546 A 19920709 A61B-017/20 US 93127936 A 19930928 WO 9508954 A1 19950406 WO 94US11274 A 19940926 A61B-017/22 EP 721315 A1 19960717 EP 94930590 A 19940926 A61B-017/22 WO 94US11274 A 19940926
                                                                         199509 B
                                                                         199519
                                                                         199633
WO 94US11274 A 19940926
JP 9503137 W 19970331 WO 94US11274 A 19940926 A61B-017/36
JP 95510487 A 19940926
Priority Applications (No Type Date): US 93127936 A 19930928; US 92911546 A
  19920709
Filing Details:
Patent
           Kind Filing Notes
                                     Application
                                                   Patent
US 5382228 A CIP of
                                     US 92911546
                 CIP of
                                                    US 5312328
WO 9508954 A1
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Designated States (National): CA JP
   Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL
   PT SE
EP 721315
            Al Based on
                                               WO 9508954
   Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC
   NL PT SE
JP 9503137 W Based on
                                               WO 9508954
Language, Pages: US 5382228 (19); WO 9508954 (E, 43); EP 721315 (E, 19); JP
  9503137 (44)
 Ultrasound catheter for removing obstructions from blood
...A61B-017/22
International Patent Class (Main): A61B-017/20 ...
...A61B-017/22 ...
...A61B-017/36
                (Item 17 from file: 351)
 13/3,K/17
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
             **Image available**
010134773
WPI Acc No: 95-036024/199505
XRPX Acc No: N95-028467
   Removing obstructions from artery using endarterectomy catheter -
 uses movable razor sharp and cylindrical primary shear inside kidney
 shaped housing with opening with smooth or serrated or threaded finish on
 its inner diameter, moved by firing wire connected to trigger
Patent Assignee: HALLIBURTON A G (HALL-I); HEC MEDICAL ARTS LTD (HECM-N)
Inventor: HALLIBURTON A G
Number of Countries: 053 Number of Patents: 003
Patent Family:
Patent No Kind Date
                       Applicat No Kind Date
                                                 Main IPC
                                                                  Week
WO 9428803 A1 19941222 WO 94CA338 A 19940610 A61B-017/22
CA 2098246 A 19941212 CA 2098246 A 19930611 A61B-017/22
AU 9470656 A 19950103 AU 9470656 A 19940610 A61B-017/22
                                                                  199505 B
                                                                  199511
                                                                  199521
Priority Applications (No Type Date): CA 2098246 A 19930611
Filing Details:
Patent
          Kind Filing Notes
                                 Application Patent
WO 9428803 A1
   Designated States (National): AT AU BB BG BR BY CH CN CZ DE DK ES FI GB
   GE HU JP KE KG KP KR KZ LK LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE
   SI SK TJ TT UA UZ VN
   Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL
   OA PT SE
AU 9470656 A Based on
                                               WO 9428803
Language, Pages: WO 9428803 (E, 54)
   Removing obstructions from artery using endarterectomy catheter -
...A61B-017/22
International Patent Class (Main): A61B-017/22
 13/3,K/18
                (Item 18 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
010104407
             **Image available**
WPI Acc No: 95-005660/199501
XRPX Acc No: N95-004739
 Catheter for removal of atherosclerosis from blood vessel walls - include
 body having ridged tip and flexible segment remote front tip, with cutter
 disposed in circumferential gap between tip and flexible segment
Patent Assignee: RYAN W J (RYAN-I)
```

Number of Countries: 001 Number of Patents: 001

Inventor: RYAN W J

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week
US 5366463 A 19941122 US 90518017 A 19900502 A61B-017/32 199501 B

US 92896736 A 19920609 US 9327221 A 19930305 B

Priority Applications (No Type Date): US 9327221 A 19930305; US 90518017 A 19900502; US 92896736 A 19920609

Filing Details:

Patent Kind Filing Notes Application Patent

US 5366463 A Cont of US 90518017 CIP of US 92896736

Language, Pages: US 5366463 (12)

...A61B-017/32

- ...Abstract (Basic): USE/ADVANTAGE An atherectomy catheter for the removal of atherosclerosis, thrombosis, cholesterol deposits, fatty nodules, and other such sclerotic material from within the blood vessels of a patient. Has no moving parts, and the undesirable material is shaved from the...
- ...of the vessel and captured and removed by the application of negative pressure as the **catheter** is withdrawn along a longitudinal segment of the vessel...

International Patent Class (Main): A61B-017/32

13/3,K/19 (Item 19 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

009674773

WPI Acc No: 93-368326/199346

Related WPI Acc No: 92-268354; 93-167326; 94-034688; 95-014004; 95-014005;

95-066282; 95-074141; 95-154997; 96-370508

XRPX Acc No: N93-284369

Ultrasound catheter for removing obstructions from e.g. blood
vessels - has ultrasound transmission member extending through catheter
body connected at its distal end to distal head protruding from
catheter body

Patent Assignee: BAXTER INT INC (BAXT)

DE 69318015 E 19980520 DE 618015

Inventor: GESSWEIN D H; NITA H; PASSAFARO J D

inventor: GESSWEIN D H; NITA H; PASSAFARO J D									
Number of Countries: 019 Number of Patents: 010									
Patent Family:									
			d Date	Apr	olicat No	Kin	d Date	Main IPC	Week
	9321835		19931111		93US4207			A61B-017/22	199346 B
US	5267954	Α	19931207	US	91640190	Α	19910111	A61B-017/20	199350
				US	91787292	Α	19911104		
				US	92878795	Α	19920505		
US	5312328	Α	19940517	US	91640190	Α	19910111	A61B-017/20	199419
				US	91787292	Α	19911104		
				US	92878795	Α	19920505		
				US	92911546	Α	19920709		
EΡ	639953	A1	19950301	EΡ	93911045	Α	19930504		199513
				WO	93US4207	Α	19930504		
US	5405318	Α	19950411	US	92878795	Α	19920505	A61B-017/20	199520
				US	93127985	Α	19930928		
JР	7506284	W	19950713	JP	93519599	Α	19930504	A61B-017/36	199536
				WO	93US4207	Α	19930504		
ΕP	820727	A2	19980128	ΕP	93911045	Α	19930504	A61B-017/22	199809
				EΡ	97203044	Α	19930504		
EP	820728	A2	19980128		93911045	Α	19930504	A61B-017/22	199809
					97203045	Α	19930504		
EΡ	639953	В1	19980415		93911045	Α	19930504	A61B-017/22	199819
					93US4207	Α	19930504		
				EΡ	97203044	Α	19930504		

EP 97203045 A 19930504

A 19930504 A61B-017/22

199826

EP 93911045 A 19930504 WO 93US4207 A 19930504

Priority Applications (No Type Date): US 92911546 A 19920709; US 92878795 A 19920505; US 91640190 A 19910111; US 91787292 A 19911104; US 93127985 A 19930928 Filing Details: Patent Kind Filing Notes Application Patent WO 9321835 A1 Designated States (National): CA JP Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE US 5267954 CIP of US 91640190 Α US 91787292 CIP of US 91640190 US 5312328 Α CIP of US 91787292 CIP of US 92878795 CIP of CIP of US 5267954 CIP of US 5364115 EP 639953 Al Based on WO 9321835 Designated States (Regional): DE FR GB IT US 5405318 A Div ex US 92878795 Div ex US 5267954 JP 7506284 W Based on WO 9321835 EP 820727 A2 Div ex EP 93911045 Div ex EP 639953 Designated States (Regional): DE FR GB IT EP 820728 A2 Div ex EP 93911045 Div ex EP 639953 Designated States (Regional): DE FR GB IT EP 639953 B1 Related to EP 97203044 EP 97203045 Related to Related to EP 820727 Related to EP 820728 Based on WO 9321835 Designated States (Regional): DE FR GB IT DE 69318015 E Based on EP 639953 Based on WO 9321835 Language, Pages: WO 9321835 (E, 52); US 5267954 (17); US 5312328 (17); EP 639953 (E); US 5405318 (15); JP 7506284 (11); EP 820727 (E, 18); EP 820728 (E, 18); EP 639953 (E, 23) Ultrasound catheter for removing obstructions from e.g. blood vessels - has ultrasound transmission member extending through catheter body connected at its distal end to distal head protruding from catheter body ...A61B-017/20

- ...Abstract (Equivalent): The ultrasound catheter for removing obstructions from tubular anatomic structures such as blood vessels , the catheter comprising an elongate flexible catheter body having an ultrasound transmission member or wire extending longitudinally therethrough. A distal head is...
- ...the distal end of the ultrasound transmission member or wire and is affixed to the **catheter** body...
- ...An ultrasonic catheter for **removing obstructions** from **blood vessels** has an ultrasound transmission member (24) extending through a
 flexible **tube** (20) from a proximal generator to a distal head (26)
 fixed to the **tube**.

International Patent Class (Main): A61B-017/20 ...

- ...A61B-017/22 ...
- ...A61B-017/36

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13/3,K/20 (Item 20 from file: 351)
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DIALOG(R) File 351: DERWENT WPI

(c) 1999 Derwent Info Ltd. All rts. reserv.

009423137 **Image available**
WPI Acc No: 93-116652/199314
XRPX Acc No: N93-088974

Extractor for removal of embolic debris - has catheter with two lumens having opening for access to blood vessel

Patent Assignee: MICHAEL T A D (MICH-I)

Inventor: MICHAEL T A D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week
US 5195955 A 19930323 US 89435887 A 19891114 A61B-017/20 199314 B
US 90492580 A 19900313 B

Priority Applications (No Type Date): US 90492580 A 19900313; US 89435887 A 19891114

Filing Details:

Patent Kind Filing Notes Application Patent

US 5195955 A CIP of US 89435887

Language, Pages: US 5195955 (7)

...A61B-017/20

...Abstract (Basic): The device for temporarily blocking a **blood vessel** of a patient during a procedure for **removing** an **obstruction** deposited on the **blood vessel** wall includes: a **catheter** having a proximal end and a distal end and arranged to be inserted into the **blood vessel** via the distal end. The **catheter** has a peripheral wall and being provided with first and second lumens extending from the proximal end. The first lumen extends fully to the distal end of the **catheter**.

International Patent Class (Main): A61B-017/20
International Patent Class (Additional): A61M-029/00

13/3,K/21 (Item 21 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c) 1999 Derwent Info Ltd. All rts. reserv.

009406647 **Image available**
WPI Acc No: 93-100157/199312
XRPX Acc No: N93-076266

Blood vessel thrombus removal process - involves displacing flexible piston slidably in flexible catheter and retracting it to suck thrombus into system

Patent Assignee: SHIBER S (SHIB-I)

Inventor: SHIBER S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week
US 5192268 A 19930309 US 91722126 A 19910627 A61B-017/22 199312 B

Priority Applications (No Type Date): US 91722126 A 19910627 Language, Pages: US 5192268 (5)

Blood vessel thrombus removal process...

...involves displacing flexible piston slidably in flexible catheter and retracting it to suck thrombus into system
International Patent Class (Main): A61B-017/22

13/3,K/22 (Item 22 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c) 1999 Derwent Info Ltd. All rts. reserv.

009344873 **Image available** WPI Acc No: 93-038345/199305 XRPX Acc No: N93-029358 Intravascular catheter with rotating head and fluid infusion provision uses removable cable to drive working head, with connections for fluid to enter central passageway with exit ports in flexible exterior jacket
Patent Assignee: DOW CORNING ENTERPRISES INC (DOWO); DOW CORNING ENTERPRISES (DOWO); DOW CORNING WRIGHT CORP (DOWO); THERATEK INT INC (THER-N); THERATECK INT INC (THER-N) Inventor: FINE M J; ROGERS E S Number of Countries: 005 Number of Patents: 005 Patent Family: Patent No Kind Date Applicat No Kind Date Main IPC Week Patent No Kind Date Applicat No Kind Date Main IPC

EP 526042 Al 19930203 EP 92306486 A 19920715 A61B-017/22

US 5261877 A 19931116 US 91734381 A 19910722 A61M-031/00

US 5358509 A 19941025 US 91734381 A 19910722 A61B-017/32

US 9369903 A 19930601

EP 526042 Bl 19980513 EP 92306486 A 19920715 A61B-017/22

DE 69225438 E 19980618 DE 625438 A 19920715 A61B-017/22

EP 92306486 A 19920715 199305 B 199347 199442 199823 199830 Priority Applications (No Type Date): US 91734381 A 19910722; US 9369903 A 19930601 Filing Details: Kind Filing Notes Patent Application Patent EP 526042 A 1 Designated States (Regional): DE FR GB IT US 5358509 A Cont of US 91734381 Cont of US 5261877 EP 526042 В1 Designated States (Regional): DE FR GB IT EP 526042 DE 69225438 E Based on Language, Pages: EP 526042 (E, 24); US 5261877 (21); US 5358509 (21); EP 526042 (E, 24) ...A61M-031/00 ... Abstract (Equivalent): USE/ADVANTAGE - To remove a thrombus from a blood vessel , allowing catheter to remain in place in vessel... International Patent Class (Main): A61B-017/22A61B-017/32A61M-031/00 (Item 23 from file: 351) 13/3,K/23 DIALOG(R) File 351: DERWENT WPI (c) 1999 Derwent Info Ltd. All rts. reserv. 009013624 **Image available** WPI Acc No: 92-140960/199217 XRPX Acc No: N92-105454 Apparatus for removing blood clots from arteries and veins includes outer catheter and inner catheter with inflatable balloon at its distal end Patent Assignee: GUENTHER R W (GUEN-I); VORWERK D (VORW-I) Inventor: GUENTHER R W; VORWERK D Number of Countries: 002 Number of Patents: 002 Patent Family: Patent No Kind Date Applicat No Kind Date Main IPC Week US 5102415 A 19920407 US 90575450 A 19900830 CH 682978 A5 19931231 CH 902810 A 19900829 A61B-017/22 199217 B 199351 Priority Applications (No Type Date): DE 89U10603 U 19890906

Apparatus for removing blood clots from arteries and veins...

Language, Pages: US 5102415 (6)

...includes outer catheter and inner catheter with inflatable balloon at its distal end ...A61B-017/22

...Abstract (Basic): A triple catheter for removing blood clots from arteries and veins is equipped with an outer catheter (1) that can be inserted into a blood vessel and an inner catheter (5) with an inflatable balloon (6) at its distal end that can be inserted into the outer catheter. The inner catheter is surrounded by an intermediate catheter also inserted into the outer catheter.

International Patent Class (Main): A61B-017/22
International Patent Class (Additional): A61M-025/00

13/3,K/24 (Item 24 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

008988911 **Image available**
WPI Acc No: 92-116179/199215
XRPX Acc No: N92-086882

Tissue excision catheter system - has sub-assembly carrying cutting head at distal end and inflatable cuff to be placed around limb

Patent Assignee: FISCHELL R E (FISC-I); MEDICAL INNOVATIVE TECHNOLOGIES R&D

LP (MEDI-N)

Inventor: FISCHELL R E

Number of Countries: 017 Number of Patents: 006

Patent Family:

 Patent No
 Kind
 Date
 Applicat No
 Kind
 Date
 Main IPC
 Week

 EP 479433
 A 19920408
 EP 91308146
 A 19910905
 199215
 B

 AU 9183587
 A 19920312
 AU 9183587
 A 19910903
 A61B-017/22
 199220

 CA 2050511
 A 19920306
 CA 2050511
 A 19910903
 A61B-017/32
 199224

 US 5127902
 A 19920707
 US 90577633
 A 19900905
 A61B-017/20
 199230

 EP 479433
 A3 19920603
 EP 91308146
 A 19910905
 A61B-017/22
 199332

 AU 641042
 B 19930909
 AU 9183587
 A 19910903
 A61B-017/22
 199343

Priority Applications (No Type Date): US 90577633 A 19900905

Filing Details:

Patent Kind Filing Notes Application Patent

EP 479433 A

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL SE AU 641042 B AU 9183587

Language, Pages: EP 479433 (13); US 5127902 (12)

...A61B-017/22

... Abstract (Basic): The tissue excision catheter has a sub-assembly (10) which has an excision catheter and this can be inserted into the blood vessel. At its distal end is a cutting head (30) which has a cutting edge (32a). This can be drawn through the vessel to excise obstructing tissue...

International Patent Class (Main): A61B-017/20 ...

...A61B-017/22 ...

...A61B-017/32

International Patent Class (Additional): A61M-025/00

13/3,K/25 (Item 25 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

008938070 **Image available**
WPI Acc No: 92-065339/199209
Related WPI Acc No: 97-502193
XRPX Acc No: N92-049144

Catheter assembly for unblocking artery - has primary shear movable across opening in housing insertable into artery, with shear operable from outside housing

Patent Assignee: GADALLAH ENTR LTD (GADA-N); HEC MEDICAL ARTS LTD (HECM-N); HALLIBURTON A G (HALL-I)

Inventor: HALLIBURTO A G; HALLIBURTON A G Number of Countries: 019 Number of Patents: 003

Patent Family:

Applicat No Kind Date Patent No Kind Date Main IPC Week CA 2043737 A 19911206 CA 2043737 A 19910603 EP 582005 A1 19940209 EP 92307047 A 19920803 A61B-017/22 199209 B 199406 N US 5368603 A 19941129 US 90533402 A 19900605 A61M-025/00 199502

Priority Applications (No Type Date): US 90533402 A 19900605; EP 92307047 A 19920803

Filing Details:

Patent Kind Filing Notes Application Patent

EP 582005

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

Language, Pages: EP 582005 (E, 14); US 5368603 (12)

...A61B-017/22

- ... Abstract (Basic): USE An endarterectomy catheter for removing obstructions from an artery . (34pp Dwg.No.1/5)
- ... Abstract (Equivalent): The endarterectomy catheter for removing obstructions from an artery comprises a housing adapted for entry into the artery . The housing includes a forward end and a rearward end, and has an opening in...

International Patent Class (Main): A61B-017/22 ...

...A61M-025/00

International Patent Class (Additional): A61B-017/32

13/3,K/26 (Item 26 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c) 1999 Derwent Info Ltd. All rts. reserv.

Image available 008881007

WPI Acc No: 92-008276/199202

XRPX Acc No: N92-006350

Aspiration catheter removing blockage from blood ve nozzles at end of suction tube to direct water jets rearwards

Patent Assignee: RAU W S (RAUW-I)

Inventor: RAU W S

Number of Countries: 001 Number of Patents: 002

Patent Family:

Applicat No Kind Date Patent No Kind Date Main IPC Week DE 4018736 A 19920102 DE 4018736 A 19900612 199202 B A 19900612 A61B-017/22 DE 4018736 C 19920514 DE 4018736 199220

Priority Applications (No Type Date): DE 4018736 A 19900612 Language, Pages: DE 4018736 (12)

removing blockage **from** blood Aspiration catheter vessel - ...

- ...has nozzles at end of suction tube to direct water jets rearwards ...A61B-017/22
- ... Abstract (Basic): The aspiration catheter is for removing blockages in blood vessels and other internal organs. It has a suction tube (18) with the tube wall (2) on one side of the catheter being of increased thickness to enable a longitudinal hole (17) to be formed in

International Patent Class (Main): A61B-017/22

International Patent Class (Additional): A61M-001/00 ...

13/3,K/27 (Item 27 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c) 1999 Derwent Info Ltd. All rts. reserv.

008828356 **Image available** WPI Acc No: 91-332372/199145

XRPX Acc No: N91-254792

Thrombus removing system - includes guide wire catheter having first balloon inflatable for blocking blood vessel at position downstream of thrombus

Patent Assignee: YA W D (YAWD-I)

Inventor: YA W D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Applicat No Kind Date Patent No Kind Date Main IPC Week US 5059178 A 19911022 US 91298547 A 19910118 199145 B

Priority Applications (No Type Date): JP 88194133 A 19880803

Thrombus removing system...

...includes guide wire catheter having first balloon inflatable for blocking blood vessel at position downstream of thrombus

... Abstract (Basic): USE - For percutaneously removing a thrombus from a blood vessel by using catheters .

International Patent Class (Additional): A61M-025/02

13/3,K/28 (Item 28 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

Image available 008705731

WPI Acc No: 91-209752/199129

Related WPI Acc No: 97-247160; 97-247161

XRAM Acc No: C91-090954 XRPX Acc No: N91-160120

Combination catheter-filtermide imidazole derivs. - has PTFE sleeve and inner duct, with filter made from flexible vanes in sleeve

Patent Assignee: LEFEBVRE J (LEFE-I); LEFEBVRE J M (LEFE-I)

Inventor: LEFEBVRE J; LEFEBVRE J M

Number of Countries: 016 Number of Patents: 008

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week A 19910717 EP 90403150 A 19901107 199129 B EP 437121 CA 2029280 A 19910614 199134 FR 2655533 A 19910614 FR 8917201 A 19891213 199135 19950606 US 90610414 A 19901107 A61M-031/00 199528 US 5421832 A Α US 92899213 19920616 US 94242038 19940512 Α EP 437121 B1 19970820 EP 90403150 19901107 A61F-002/02 199738 Α EP 97200128 19901107 Α EP 97200129 A 19901107 DE 69031304 E 19970925 DE 631304 Α 19901107 A61F-002/02 199744 EP 90403150 19901107 Α EP 771550 A3 19970820 EP 90403150 19901107 199745 Α EP 97200129 Α 19901107 ES 2104595 T3 19971016 EP 90403150 A 19901107 A61F-002/02 199748

Priority Applications (No Type Date): FR 8917201 A 19891213

Filing Details:

Application Patent Kind Filing Notes Patent

EP 437121

Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE

US 5421832 A CIP of

US 90610414 US 92899213

Cont of B1 Related to EP 97200128 EP 437121

EP 97200129 Related to

Related to EP 771549 EP 771550 Related to

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DE 69031304 E Based on EP 437121

A3 Div ex EP 90403150 EP 771550

> Div ex EP 437121

ES 2104595 T3 Based on EP 437121 Language, Pages: US 5421832 (7); EP 437121 (F, 7)

...A61M-031/00

... Abstract (Equivalent): USE/ADVANTAGE - The filter is to remove blood clots . The catheter is to introduce the filter (pref. temporarily) into the vein . The new device avoids formation of localised clots due to the presence of the filter-catheter in the vein .

...International Patent Class (Main): A61M-031/00 International Patent Class (Additional): A61B-017/00 ...

...A61M-025/00

13/3,K/29 (Item 29 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c) 1999 Derwent Info Ltd. All rts. reserv.

008690029

WPI Acc No: 91-194049/199127

XRPX Acc No: N91-148553

Method of removal of blood clots - uses catheter into which saline solution is pumped at pressure

Patent Assignee: RUPPRECHT H (RUPP-I)

Inventor: RUPPRECHT H J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week DE 3941949 A 19910627 DE 3941949 A 19891220 199127 B

Priority Applications (No Type Date): DE 3941949 A 19891220

...Abstract (Basic): The method is for **removing** a blood **clot** or embolism by using a **catheter** . The **catheter** is inserted into the affected blood vessel and then filled with a saline solution. The saline solution is pumped under pressure into the catheter which has a nozzle at its distal end...

International Patent Class (Additional): A61B-017/22 ...

...A61M-025/00

(Item 30 from file: 351) 13/3, K/30

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

008637861 **Image available** WPI Acc No: 91-141891/199120

XRPX Acc No: N91-109229

Atherectomy system using guide wire insertable in artery - has cutter connected to distal end of torque tube to remove obstructive matter Patent Assignee: INTERVENTIONAL TECHNOLOGIES INC (INTE-N); INTERVENTIONAL

TECH (INTE-N)

Inventor: FARR A F; RADISCH H R

Number of Countries: 009 Number of Patents: 007

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Patent Family:
Patent No Kind Date
                          Applicat No Kind Date
                                                     Main IPC
                                                                      Week
            A 19910515 EP 90302065 A 19900227
EP 427368
                                                                      199120 B
AU 9050145 A 19910516
US 5026384 A 19910625 US 89433032 A 19891107
CA 2009953 A 19910507
                                                                      199127
                                                                      199128
CA 2009953 A 19941108 CA 2009953 A 19900213 A01B 01./0_
EP 427368 B1 19950405 EP 90302065 A 19900227 A61B-017/22
DE 69018379 E 19950511 DE 618379 A 19900227 A61B-017/22
EP 90302065 A 19900227
                                                                      199129
                                                                      199445
                                                                      199518
                                                                      199524
Priority Applications (No Type Date): US 89433032 A 19891107
Filing Details:
Patent
          Kind Filing Notes
                                 Application Patent
EP 427368
            Α
   Designated States (Regional): BE DE FR GB LU NL
EP 427368
            В1
   Designated States (Regional): BE DE FR GB LU NL
DE 69018379 E Based on
                                                  EP 427368
Language, Pages: EP 427368 (E, 17)
 Atherectomy system using guide wire insertable in artery - ...
... has cutter connected to distal end of torque tube to remove
  obstructive matter
...A61B-017/32
International Patent Class (Main): A61B-017/32
International Patent Class (Additional): A61B-017/22
 13/3,K/31
                 (Item 31 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
008463616
WPI Acc No: 90-350616/199047
XRPX Acc No: N90-267818
 Surgical probe, e.g. for clearing blood vessel - comprises catheter with
 percussion tip to reduce risk of blood vessel rupture
Patent Assignee: HONORE H (HONO-I)
Inventor: HONORE H
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date Applicat No Kind Date Main IPC
                                                                      Week
FR 2645009 A 19901005 FR 894016
                                                                      199047 B
                                       A 19890328
Priority Applications (No Type Date): FR 894016 A 19890328
... Abstract (Basic): surgical probe, e.g. for removing an obstruction in a
```

- blood vessel such as an artery (10), consists of a catheter (24) which can be introduced into the blood vessel and contains a percussion element (16) in its tip. The percussion element comprises a spring...
- ... hammer (18) which strikes against the inner surface of the solid tip (20) of the catheter . The interacting surfaces of the hammer and catheter tip are preferably irregular in shape, e.g. with ribs and recesses, while the outer surface (22) of the catheter tip is bullet-shaped...

International Patent Class (Additional): A61B-017/36 ...

...A61M-025/00

13/3,K/32 (Item 32 from file: 351) DIALOG(R) File 351: DERWENT WPI (c) 1999 Derwent Info Ltd. All rts. reserv.

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**Image available**
008435336
WPI Acc No: 90-322336/199043
Related WPI Acc No: 88-023054; 89-129084; 89-241236; 89-372329; 90-031623;
  90-075487; 90-283780; 90-284203; 91-289385; 92-294198; 94-248287;
  95-301932; 95-375011; 97-401688
XRPX Acc No: N90-246902
Rotary catheter for removing arterial obstructions - comprises
 diametrical stabilised torque-transmitting catheter with rotary corner
 inserted into blood vessel over flexible guide wire
Patent Assignee: SHIBER S A (SHIB-I); SHIBER S (SHIB-I); SURGICAL SYSTEMS &
  INSTR INC (SURG-N)
Inventor: SHIBER S A; SHIBER S
Number of Countries: 004 Number of Patents: 004
Patent Family:
Patent No Kind Date Applicat No Kind Date Main IPC
                                                              Week
EP 393834 A 19901024 EP 90302792 A 19900315 B
                                                              199043 B
US 5007896 A 19910416 US 89324616 A 19890316 B
                                                              199118
EP 393834 B1 19960508
                                                              199623
DE 69026860 E 19960613 DE 626860
                                   A 19900315 B
                                                              199629
                       EP 90302792 A 19900315
Priority Applications (No Type Date): US 89324616 A 19890316; US 84609846 A
  19840514; US 86874546 A 19860616; US 8718083 A 19870224; US 8778042 A
  19870727; US 88205479 A 19880613; US 88225880 A 19880729; US 88243900 A
  19880913; US 88286509 A 19881219
Filing Details:
                             Application Patent
Patent
         Kind Filing Notes
EP 393834
  Designated States (Regional): DE FR GB
EP 393834
           В1
  Designated States (Regional): DE FR GB
DE 69026860 E Based on
                                            EP 393834
Language, Pages: EP 393834 (E, 10)
Rotary catheter for removing arterial obstructions - ...
...comprises diametrical stabilised torque-transmitting catheter with
rotary corner inserted into blood vessel over flexible guide wire
...A61B-017/22
... Abstract (Equivalent): An atherectomy system (10) insertable into a
                vessel (11) for coring and removing an obstruction
   therein, comprising: a flexible guidewire (17) insertable into said
         vessel (11); a flexible rotary catheter (19) having a
    continuous passage therethrough rotatably disposed and slidable over
   said flexible guidewire (17), said flexible rotary catheter having
   proximal and distal ends (13,14); a rotary coring means (22) for
```

- cutting and...
- ...material located at said distal end; a coupling means (25) for rotating said flexible rotary catheter (19) around said flexible guidewire (17) located at said proximal end, means for diametrically stabilizing the flexible rotary catheter comprising a series of hoop members (34), and means for transmitting torque, said hoop members (34) and the means for transmitting torque together forming a skeleton for said rotary catheter characterised in that said means for transmitting torque comprise a series of connecting members (35...
- ...incorporated between the proximal large diameter and distal small diameter sections of said flexible rotary catheter .
- ... Abstract (Equivalent): An atherectomy system inserts into a human blood vessel over a flexible guide-wire for remotely cutting and removing an obstruction within. It has a diametrical stabilised torque transmitting flexible rotary-catheter equipped with a rotary corner at its distal end and a motor connected to its... International Patent Class (Main): A61B-017/22

International Patent Class (Additional): A61B-017/32 ...

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13/3,K/33
               (Item 33 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
             **Image available**
WPI Acc No: 90-284203/199038
Related WPI Acc No: 88-023054; 89-129084; 89-241236; 89-372329; 90-031623;
  90-075487; 90-283780; 90-322336; 91-289385; 92-294198; 94-248287;
  95-301932; 95-375011; 97-401688
XRPX Acc No: N90-219145
 Device for cutting obstruction in blood vessel - has flexible guide wire
 inserted in vessel and flexible rotary catheter disposed and inserted
 into vessel over flexible guide wire
Patent Assignee: SHIBER S (SHIB-I); SURGICAL SYSTEMS & INSTR INC (SURG-N)
Inventor: SHIBER S
Number of Countries: 005 Number of Patents: 005
Patent Family:
Patent No Kind Date
                       Applicat No Kind Date
                                                  Main IPC
                                                                 Week
EP 387980 A 19900919 EP 90300267 A 19900110 B
CA 2010895 A 19900913 B
US 5002553 A 19910326 US 89323328 A 19890313 B
EP 387980 B1 19951011 B
                                                                 199038 B
                                                                 199048
                                                                 199115
                                                                 199545
DE 69022868 E 19951116 DE 622868
                                      A 19900110 B
                                                                 199551
                        EP 90300267 A
                                         19900110
Priority Applications (No Type Date): US 89323328 A 19890313; US 84609846 A
  19840514; US 86874546 A 19860616; US 8718083 A 19870224; US 8778042 A
  19870727; US 88205479 A 19880613; US 88225880 A 19880729; US 88243900 A
  19880913; US 88286509 A 19881219
Filing Details:
Patent
         Kind Filing Notes
                               Application Patent
EP 387980
           Α
   Designated States (Regional): DE FR GB
EP 387980
           В1
   Designated States (Regional): DE FR GB
DE 69022868 E Based on
                                              EP 387980
Language, Pages: EP 387980 (E, 5)
...A61B-017/22
... Abstract (Equivalent): A rotary catheter insertable into a patient's
          vessel for cutting and removing an obstruction therein
    comprising a flexible tube (14) with front and rear ends insertable
    into the blood vessel; a blade (17) mounted to the front end (15)
    of the tube (14) the blade defining a through-hole forming with said
    flexible tube (14) a passage for passing obstruction material which
    is ingested into said tube (14); and means (20) connected to the rear
    end (16) of the tube (14) for rotating the flexible tube (14) and
    the blade (17); characterised by a flexible guide wire (12) insertable
    into the blood vessel; the flexible tube being slidable and
    rotatably disposed on said guide wire (12); said blade is tubular and
    cuts, in use, a narrow circular pass of the obstruction in the blood
   vessel to separate a centre core therefrom, and said passage is
    continuous...
International Patent Class (Main): A61B-017/22
International Patent Class (Additional): A61B-017/32 ...
 13/3,K/34
               (Item 34 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
             **Image available**
008396779
WPI Acc No: 90-283780/199038
Related WPI Acc No: 88-023054; 89-129084; 89-241236; 89-372329; 90-031623;
  90-075487; 90-284203; 90-322336; 91-289385; 92-294198; 94-248287;
```

95-301932; 95-375011 XRPX Acc No: N90-218852

Device for removing obstruction in blood vessel - has flexible guide wire insertable into vessel and flexible rotary catheter for coring and ingesting obstruction material

Patent Assignee: SHIBER S (SHIB-I); SURGICAL SYSTEMS & INSTR INC (SURG-N)

Inventor: SHIBER S

Number of Countries: 005 Number of Patents: 005

Patent Family:

 Patent No
 Kind
 Date
 Applicat No
 Kind
 Date
 Main
 IPC
 Week

 EP
 387451
 A
 19900919
 EP
 89313314
 A
 19891219
 B
 199038
 B

 CA
 2005818
 A
 19900913
 B
 199048
 B
 199048

 US
 5024651
 A
 19910618
 US
 89322497
 A
 19890313
 B
 199127

 EP
 387451
 B1
 19950308
 EP
 89313314
 A
 19891219
 B
 199520

 EP
 89313314
 A
 19891219
 B
 199520

Priority Applications (No Type Date): US 89322497 A 19890313; EP 87305277 A 19870615; CA 539735 A 19870616; JP 87150056 A 19870616

Filing Details:

Patent Kind Filing Notes Application Patent

EP 387451 A

Designated States (Regional): DE FR GB

EP 387451 B1

Designated States (Regional): DE FR GB

DE 68921603 E Based on EP 387451

Language, Pages: EP 387451 (E, 9)

Device for removing obstruction in blood vessel - ...

- ...has flexible guide wire insertable into vessel and flexible rotary catheter for coring and ingesting obstruction material ...A61B-017/22
- ...Abstract (Equivalent): A rotary catheter insertable into a patient's blood vessel for cutting and removing an obstruction therein comprising a flexible tube (14) with front and rear ends insertable into the blood vessel; a blade (17) mounted to the front end (15) of the tube (14) the blade defining a through-hole forming with said flexible tube (14) a passage for passing obstruction material which is ingested into said tube (14); and means (20) connected to the rear end (16) of the tube (14) for rotating the flexible tube (14) and the blade (17); characterised by a flexible guide wire (12) insertable into the blood vessel; the flexible tube being slidable and rotatably disposed on said guide wire (12); said blade is tubular and cuts, in use, a narrow circular pass of the obstruction in the blood vessel to separate a centre core therefrom, and said passage is continuous...

International Patent Class (Main): A61B-017/22
International Patent Class (Additional): A61B-017/32 ...

...A61M-025/01 ...

...A61M-029/02

13/3,K/35 (Item 35 from file: 351) DIALOG(R)File 351:DERWENT WPI

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008357644 **Image available**
WPI Acc No: 90-244645/199032
XRPX Acc No: N90-189714

Thrombus removal catheter - with framework composed of resilient strings drawn taut over balloon and going round end face of working end of pipe

Patent Assignee: PETROZAVOD UNIV (UYPE-R)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week

Priority Applications (No Type Date): SU 4272502 A 19870701

...Abstract (Basic): ADVANTAGE - This construction of the catheter prevents damage to the valve appts. of the vein in retrograde removal of the thrombus from the proximal segment. Bul. 3/23.1.90 (3pp Dwg.No.1/4)

International Patent Class (Additional): A61M-025/00

13/3,K/36 (Item 36 from file: 351)

DIALOG(R) File 351: DERWENT WPI

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008291219 **Image available**

WPI Acc No: 90-178220/199023

Related WPI Acc No: 90-216698; 92-199368

XRPX Acc No: N90-138572

Opening partially or totally blocked blood vessel - using catheter with rotatable head inserted in blocked region, and using dye to monitor progress

Patent Assignee: CORDIS CORP (CRDC)

Inventor: STEVENS R C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week
US 4923462 A 19900508 US 88233998 A 19880815 Week
199023 B

Priority Applications (No Type Date): US 8727186 A 19870317; US 88233998 A 19880815

...Abstract (Basic): The method for opening a partially or totally occluded blood vessel uses a conventional catheter inserted within a patient to ascertain the condition of a blood vessel. If it is determined that sufficient blockage exists to cannulize the vessel, a small diameter drive catheter with a rotable head at a distal end is inserted into the conventional catheter in close proximity to the occluded region. The head is rotated at high speeds as dye is injected through the catheter to monitor progress of the procedure. Different sized rotating heads having different blockage removing characteristics are inserted until the procedure has been completed to the physician's satisfaction. The...

...procedure. The drive wire is covered by a coiled wire sheath. ADVANTAGE
- Useful in small **blood vessels**. (10pp Dwg.No.1A/10)
International Patent Class (Additional): A61B-017/32

13/3,K/37 (Item 37 from file: 351)

DIALOG(R) File 351: DERWENT WPI

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008188486

WPI Acc No: 90-075487/199010

Related WPI Acc No: 88-023054; 89-129084; 89-241236; 89-372329; 90-031623;

90-283780; 90-284203; 90-322336; 91-289385; 92-294198; 94-248287;

95-301932; 95-375011; 97-401688

XRPX Acc No: N90-057999

Atherectomy cutting apparatus - has flexible guide wire over which flexible coring catheter is fitted

Patent Assignee: SHIBER S (SHIB-I); SURGICAL SYSTEMS & INSTR INC (SURG-N)

Inventor: SHIBER S

Number of Countries: 005 Number of Patents: 005

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week
US 4894051 A 19900116 US 88286509 A 19881219 B 199010 B
EP 375381 A 19900627 EP 89313315 A 19891219 B 199026

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CA 2005817 A 19900619 B 199036
EP 375381 B1 19960228 EP 89313315 A 19891219 B 199613
DE 68925803 E 19960404 DE 625803 A 19891219 B 199619
EP 89313315 A 19891219
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Priority Applications (No Type Date): US 88286509 A 19881219; US 84609846 A 19840514; US 86874546 A 19860616; US 8718083 A 19870224; US 8778042 A 19870727; US 88205479 A 19880613; US 88225880 A 19880729; US 88243900 A 19880913

Filing Details:

Patent Kind Filing Notes Application Patent

EP 375381 A

Designated States (Regional): DE FR GB

EP 375381 B1

Designated States (Regional): DE FR GB

DE 68925803 E Based on EP 375381 Language, Pages: US 4894051 (8); EP 375381 (E, 11)

...A61B-017/22

...Abstract (Equivalent): A rotary catheter insertable into a patient's blood vessel for cutting and removing an obstruction therein comprising a flexible tube (14) with front and rear ends insertable into the blood vessel; a blade (17) mounted to the front end (15) of the tube (14) the blade defining a through-hole forming with said flexible tube (14) a passage for passing obstruction material which is ingested into said tube (14); and means (20) connected to the rear end (16) of the tube (14) for rotating the flexible tube (14) and the blade (17); characterised by a flexible guide wire (12) insertable into the blood vessel; the flexible tube being slidable and rotatably disposed on said guide wire (12); said blade is tubular and cuts, in use, a narrow circular pass of the obstruction in the blood vessel to separate a centre core therefrom, and said passage is continuous...

International Patent Class (Main): A61B-017/22
International Patent Class (Additional): A61B-017/32 ...

...A61M-025/01

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13/3,K/38 (Item 38 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
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008144622 **Image available**
WPI Acc No: 90-031623/199005

Related WPI Acc No: 88-023054; 89-129084; 89-241236; 89-372329; 90-075487; 90-283780; 90-284203; 90-322336; 91-289385; 92-294198; 94-248287;

95-301932; 95-375011; 97-401688

XRPX Acc No: N90-024335

Atherectomy device for removing arterial obstruction - comprises insertable flexible guide wire with flexible rotary catheter slidable over it and with bent-toothed blade at distal end

Patent Assignee: SHIBER S (SHIB-I); SURGICAL SYSTEMS (SURG-N); SURGICAL SYSTEMS & INSTR INC (SURG-N)

Inventor: SHIBER S

Number of Countries: 005 Number of Patents: 005

Patent Family:

Applicat No Kind Date Patent No Kind Date Main IPC Week A 19900131 EP 89307691 A 19890728 B EP 353087 199005 B US 4957482 A 19900918 US 89326967 A 19890322 B 199040 CA 1325571 C A 19890724 B 19931228 CA 606478 199406 EP 353087 B1 19960403 EP 89307691 A 19890728 B 199618 DE 68926135 E 19960509 DE 626135 A 19890728 B 199624 EP 89307691 A 19890728

Priority Applications (No Type Date): US 89326967 A 19890322; US 88225880 A 19880729; US 84609846 A 19840514; US 86874546 A 19860616; US 8718083 A

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19870224; US 8778042 A 19870727; US 88205479 A 19880613; US 88243900 A 19880913; US 88286509 A 19881219
Filing Details:
Patent Kind Filing Notes Application Patent
EP 353087 A
   Designated States (Regional): DE FR GB
EP 353087 B1
   Designated States (Regional): DE FR GB
DE 68926135 E Based on EP 353087
Language, Pages: EP 353087 (E, 5); EP 353087 (E, 6)
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...A61B-017/22

- ...Abstract (Equivalent): An atheretomy system for cutting, ingesting and removing an obstruction from within a patients artery comprising a flexible guidewire (25) insertable into side artery, a flexible rotary catheter (13) rotatably disposed and slidable over the flexible guidewire (25) a blade (16) forming a distal end of the flexible rotary catheter (13) having at lest one tooth (18) on its periphery which is bent inwardly, a...
- -...ingesting the cut obstruction material, the continuous passage (23) being defined between the flexible rotary **catheter** (13) and the flexible guidewire (25), coupling means (22) ad the proximal end of the flexible rotary **catheter** (25) for coupling it to rotating means (19) and suction means (17) connected to said...
- ...A rotary catheter insertable into a patient's blood vessel for cutting and removing an obstruction therein comprising a flexible tube (14) with front and rear ends insertable into the blood vessel; a blade (17) mounted to the front end (15) of the tube (14) the blade defining a through-hole forming with said flexible tube (14) a passage for passing obstruction material which is ingested into said tube (14); and means (20) connected to the rear end (16) of the tube (14) for rotating the flexible tube (14) and the blade (17); characterised by a flexible guide wire (12) insertable into the blood vessel; the flexible tube being slidable and rotatably disposed on said guide wire (12); said blade is tubular and cuts, in use, a narrow circular pass of the obstruction in the blood vessel to separate a centre core therefrom, and said passage is continuous...
- ... Abstract (Equivalent): the continuous passage to pull the cut obstruction material proximally. USE For cutting, ingesting and removing an obstruction from within a patient's artery.

International Patent Class (Main): A61B-017/22

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13/3,K/39
               (Item 39 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
008107218
WPI Acc No: 89-372329/198951
Related WPI Acc No: 88-023054; 89-129084; 89-241236; 90-031623; 90-075487;
  90-283780; 90-284203; 90-322336; 91-289385; 92-294198; 94-248287;
  95-301932; 95-375011; 97-401688
XRPX Acc No: N89-283407
Atherectomy system for clearing blood
                                         vessel - uses rotary catheter
and coring means to remove vessel obstruction
Patent Assignee: SHIBER S (SHIB-I); SURGICAL SYSTEMS & INSTR INC (SURG-N)
Inventor: SHIBER S
Number of Countries: 005 Number of Patents: 008
Patent Family:
Patent No Kind Date
                       Applicat No Kind Date
                                                              Week
EP 347098 A 19891220 EP 89305762 A 19890607 B
                                                              198951 B
US 4883458 A 19891128 US 88205479 A 19880613 B
                                                              199006
US 4886490 A 19891212 US 88243900 A 19880913 B
                                                              199007
US 4979939 A 19901225 US 89350020 A 19890512 B
                                                              199103
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CA 2016577 A 19901112
                                                              199106
CA 1325151 C
              19931214 CA 602612
                                    A 19890613 B
                                                              199405
           B1 19960228 EP 89305762 A
EP 347098
                                       19890607 B
                                                              199613
DE 68925757 E 19960404 DE 625757
                                    A 19890607 B
                                                              199619
                       EP 89305762 A 19890607
Priority Applications (No Type Date): US 89350020 A 19890512; US 85609846 A
  19850514; US 88205479 A 19880613; US 88243900 A 19880913; US 89323328 A
  19890313; US 89326967 A 19890322; US 84609846 A 19840514; US 86874546 A
  19860616; US 8718083 A 19870224; US 8778042 A 19870727; US 88225880 A
  19880729; US 88286509 A 19881219
Filing Details:
Patent
         Kind Filing Notes
                               Application Patent
EP 347098
           Α
   Designated States (Regional): DE FR GB
EP 347098
           B1
   Designated States (Regional): DE FR GB
DE 68925757 E Based on
                                            EP 347098
Language, Pages: EP 347098 (E, 18); US 4883458 (13); US 4886490 (14); EP
  347098 (E, 23)
Atherectomy system for clearing blood
                                        vessel - ...
...uses rotary catheter and coring means to remove vessel obstruction
...A61B-017/22
... Abstract (Basic): An atherectomy system for coring, ingesting and
             obstructing material from a blood vessel uses a
    flexible rotary catheter (21) with a rotary corer (22), slidable over
    a guide wire (160). The catheter defines voids for collecting
    ingested material...
... Abstract (Equivalent): A rotary catheter insertable into a patient's
          vessel for cutting and removing an obstruction therein
    comprising a flexible tube (14) with front and rear ends insertable
    into the blood vessel; a blade (17) mounted to the front end (15)
    of the tube (14) the blade defining a through-hole forming with said
    flexible tube (14) a passage for passing obstruction material which
    is ingested into said tube (14); and means (20) connected to the rear
    end (16) of the tube (14) for rotating the flexible tube (14) and
   the blade (17); characterised by a flexible guide wire (12) insertable
    into the blood vessel; the flexible tube being slidable and
   rotatably disposed on said guide wire (12); said blade is tubular and
   cuts, in use, a narrow circular pass of the obstruction in the blood
   vessel to separate a centre core therefrom, and said passage is
    continuous. (Dwg. /14)n...
International Patent Class (Main): A61B-017/22
International Patent Class (Additional): A61M-025/01
13/3,K/40
              (Item 40 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
007976124
WPI Acc No: 89-241236/198933
Related WPI Acc No: 88-023054; 89-129084; 89-372329; 90-031623; 90-075487;
  90-283780; 90-284203; 90-322336; 91-289385; 92-294198; 94-248287;
  95-301932; 95-375011; 97-401688
XRPX Acc No: N89-183891
Atherectomy cutter appts. - has flexible rotary catheter fitted into
artery over quide wire
Patent Assignee: SHIBER S (SHIB-I); SURGICAL SYSTEMS & INSTR INC (SURG-N)
Inventor: SHIBER S
Number of Countries: 003 Number of Patents: 004
Patent Family:
Patent No Kind Date Applicat No Kind Date Main IPC
                                                              Week
US 4842579 A 19890627 US 88225880 A 19880729 B
                                                              198933 B
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A 19890724 B

199406

199549

CA 1325571 C 19931228 CA 606478

US 4842579 B1 19951031 US 84609846 A 19840514 B

US 86874546 A 19860616 US 8718083 A 19870224 US 88225880 A 19880729 DE 68926135 E 19960509 DE 626135 A 19890728 B 199624 EP 89307691 A 19890728

Priority Applications (No Type Date): US 88225880 A 19880729; US 84609846 A 19840514; US 86874546 A 19860616; US 8718083 A 19870224; US 88243900 A 19880913; US 88286509 A 19881219; US 89326967 A 19890322

Filing Details:

Patent Kind Filing Notes Application Patent US 4842579 B1 CIP of US 84609846

CIP of US 86874546 CIP of US 8718083

CIP of US 4732154
DE 68926135 E Based on EP 353087

Language, Pages: US 4842579 (4); US 4842579 (2)

...A61B-017/22

...Abstract (Basic): The atherectomy system for cutting, ingesting and removing an obstruction from within a patient's artery, has a flexible guide-wire insertable into the artery. A flexibly rotary catheter is rotatably disposed and insertable into the artery over the flexible guide-wire. A blade at a distal end of the flexible rotary catheter has teeth on its periphery which are rounded and bent toward the centre of the blade to ease insertion through the arteries and to reduce the probability of cutting the arterial wall during the insertion and cutting...

...Abstract (Equivalent): A rotary catheter insertable into a patient's blood vessel for cutting and removing an obstruction therein comprising a flexible tube (14) with front and rear ends insertable into the blood vessel; a blade (17) mounted to the front end (15) of the tube (14) the blade defining a through-hole forming with said flexible tube (14) a passage for passing obstruction material which is ingested into said tube (14); and means (20) connected to the rear end (16) of the tube (14) for rotating the flexible tube (14) and the blade (17); characterised by a flexible guide wire (12) insertable into the blood vessel; the flexible tube being slidable and rotatably disposed on said guide wire (12); said blade is tubular and cuts, in use, a narrow circular pass of the obstruction in the blood vessel to separate a centre core therefrom, and said passage is continuous. (Dwg. /14)

International Patent Class (Main): A61B-017/22
International Patent Class (Additional): A61B-017/32

13/3,K/41 (Item 41 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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007873836 **Image available**
WPI Acc No: 89-138948/198919

XRPX Acc No: N89-106132

Surgical instrument for removing blood vessel thrombus - consists of catheter enclosed in sheath with passage for safety guide wire

Patent Assignee: ANGIOMED AG (ANGI-N); SCHNEPP-PESCH W (SCHN-I)

Inventor: LINDENBERG J; SCHNEPP-PESCH W; SCHNEPPPES W

Number of Countries: 012 Number of Patents: 005

Patent Family:

Patent No Kind Date Applicat No Kind Date Week Main IPC A 19890510 EP 88114551 A 19880907 EP 314896 198919 B US 4998919 A 19910312 US 88259301 A 19881018 199113 B1 19940420 EP 88114551 A 19880907 A61B-017/22 EP 314896 199416 DE 3889196 G 19940526 DE 3889196 A 19880907 A61B-017/22 EP 88114551 A 19880907 199422 ES 2053654 T3 19940801 EP 88114551 A 19880907 A61B-017/22 199432

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Priority Applications (No Type Date): DE 87U14529 U 19871031
Filing Details:
Patent Kind Filing Notes
                                 Application Patent
EP 314896
   Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE
EP 314896
   Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE
DE 3889196 G Based on
ES 2053654 T3 Based on
                                               EP 314896
                                               EP 314896
Language, Pages: EP 314896 (G, 7); EP 314896 (G, 8)
 Surgical instrument for removing
                                     blood vessel
                                                         thrombus - ...
...consists of catheter enclosed in sheath with passage for safety guide
 wire
...A61B-017/22
International Patent Class (Main): A61B-017/22
International Patent Class (Additional): A61M-025/01
 13/3,K/42
                (Item 42 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
007863972
WPI Acc No: 89-129084/198917
Related WPI Acc No: 88-023054; 89-241236; 89-372329; 90-031623; 90-075487;
  90-283780; 90-284203; 90-322336; 91-289385; 92-294198; 94-248287;
  95-301932; 95-375011; 97-401688
XRPX Acc No: N89-098333
 Rotary-catheter for atherectomy - has flexible guide wire and flexible
 rotary catheter defining channel
Patent Assignee: SHIBER S (SHIB-I); SURGICAL SYSTEMS & INSTR INC (SURG-N)
Inventor: SHIBER S
Number of Countries: 005 Number of Patents: 004
Patent Family:
Patent No Kind Date Applicat No Kind Date
                                                  Main IPC
                                                                  Week
US 4819634 A 19890411 US 8778042 A 19870727
EP 358825 A 19900321 EP 88308555 A 19880916
CA 1325151 C 19931214 CA 602612 A 19890613
CA 1329531 C 19940517 CA 577462 A 19880915
                                                                  198917 B
                                                                  199012
                                                                  199405
                                                                   199425 N
Priority Applications (No Type Date): US 8778042 A 19870727; US 84609846 A
  19840514; US 86874546 A 19860616; US 8718083 A 19870224; US 88243900 A
  19880913; US 88286509 A 19881219; EP 88308555 A 19880916; US 88205479 A
  19880613; US 89350020 A 19890512; CA 577462 A 19880915
Filing Details:
Patent
         Kind Filing Notes
                                Application Patent
EP 358825
            Α
   Designated States (Regional): DE FR GB
Language, Pages: US 4819634 (10); EP 358825 (E)
...A61B-017/22
... Abstract (Basic): The atherectomy appts. is insertable into a human
   blood vessel for remotely cutting and removing an obstruction .
    It has a flexible guide-wire insertable into the blood vessel . A
    flexible rotary-catheter defines a channel and having oistal ano
    proximal ends. The flexible rotary-catheter is rotatably oisposed and
    slidable over the guide-wire...
... Abstract (Equivalent): A rotary catheter insertable into a patient's
          vessel for cutting and removing an obstruction therein
    comprising a flexible tube (14) with front and rear ends insertable
    into the blood vessel; a blade (17) mounted to the front end (15)
    of the tube (14) the blade defining a through-hole forming with said
```

flexible tube (14) a passage for passing obstruction material which is ingested into said tube (14); and means (20) connected to the rear end (16) of the tube (14) for rotating the flexible tube (14) and

the blade (17); characterised by a flexible guide wire (12) insertable into the **blood vessel**; the flexible **tube** being slidable and rotatably disposed on said guide wire (12); said blade is tubular and cuts, in use, a narrow circular pass of the obstruction in the **blood vessel** to separate a centre core therefrom, and said passage is continuous. (Dwg. /14)

International Patent Class (Main): A61B-017/22 ...

...A61M-023/00

International Patent Class (Additional): A61B-017/32

13/3,K/43 (Item 43 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c) 1999 Derwent Info Ltd. All rts. reserv.

007727826 **Image available**

WPI Acc No: 88-361758/198851

XRPX Acc No: N88-273994

Catheter removing obstructions from blood vessels - involves

boring hole and inserting balloon which is then inflated

Patent Assignee: CORDIS CORP (CRDC); DOW CORNING ENTERPRISES INC (DOWO)

Inventor: STEVENS R C

Number of Countries: 003 Number of Patents: 005

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week
DE 3811676 A 19881215 DE 3811676 A 19880407 198851 B
GB 2206795 A 19890118 GB 888075 A 19880407 198903
US 4798586 A 19890117 US 8736223 A 19870407 198906
GB 2206795 B 19910508 199119
DE 3811676 C2 19970410 DE 3811676 A 19880407 A61B-017/22 199719

Priority Applications (No Type Date): US 8736223 A 19870407 Language, Pages: DE 3811676 (10); US 4798586 (10); DE 3811676 (10)

Catheter removing obstructions **from** blood vessels - ... A61B-017/22

- ... Abstract (Basic): The catheter (10) is used to **remove** an **obstruction** (14) in a **blood vessel** (12). The **catheter** has an outer sheath enclosing a flexible wire which is connected to a boring instrument (32) at the distal end of the **catheter**. An inflatable balloon (11) is fitted between the end of the sheath and the boring...
- ...and inflated with a medium inserted in the catheter sheath. The inflated balloon enlarges the **blood vessel** thus **removing** the **obstruction**

International Patent Class (Main): A61B-017/22
International Patent Class (Additional): A61M-025/00 ...

...A61M-029/00

13/3,K/44 (Item 44 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

007721175 **Image available**

WPI Acc No: 88-355107/198850

XRPX Acc No: N88-269281

Surgical endoscope for pulmonary artery thrombus removal - uses Fogarthy catheter with inflatable balloon with suction channel for

removing thrombus tissue
Patent Assignee: KELLNER H (KELL-I); KOGLEK & STARCK GMBH ING

MEDIZINTECHNIK (KOGL-N); KELLNER H J (KELL-I); KOGLEK & STARCK (KOGL-N)

Inventor: KELLNER H

Number of Countries: 013 Number of Patents: 005

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Patent Family:
Patent No Kind Date
                         Applicat No Kind Date
                                                    Main IPC
                                                                    Week
EP 294626 A 19881214 EP 88108011 A 19880519
DE 3719250 A 19881222 DE 3719250 A 19870610
US 4862874 A 19890905 US 88204359 A 19880609
EP 294626 B1 19931215 EP 88108011 A 19880519 A61B-001/12
DE 3886268 G 19940127 DE 3886268 A 19880519 A61B-001/12
EP 88108011 A 19880519
                                                                    198850 B
                                                                    198901
                                                                    198945
                                                                    199350
                                                                    199405
Priority Applications (No Type Date): DE 3719250 A 19870610
Filing Details:
         Kind Filing Notes
                                Application Patent
Patent
EP 294626
            Α
   Designated States (Regional): AT BE CH DE ES FR GB GR IT LI NL SE
EP 294626
            В1
   Designated States (Regional): AT BE CH DE ES FR GB GR IT LI NL SE
DE 3886268 G Based on
                                                EP 294626
Language, Pages: EP 294626 (G, 6); US 4862874 (5); EP 294626 (G, 8)
 Surgical endoscope for pulmonary artery thrombus removal - ...
...uses Fogarthy catheter with inflatable balloon with suction channel
for removing
                  thrombus tissue
...A61B-001/12
International Patent Class (Main): A61B-001/12
 13/3,K/45
                (Item 45 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
007686643
WPI Acc No: 88-320575/198845
XRPX Acc No: N88-243023
Medical spark erosion catheter - removes
                                                 blockages in blood
  vessels using ultrasonic transducer to aid accurate placement
Patent Assignee: STICH BIOMED ENG (BIOM-N)
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date Applicat No Kind Date Main IPC
                                                                   Week
NL 8700632 A 19881017 NL 87632 A 19870317
                                                                    198845 B
Priority Applications (No Type Date): NL 87632 A 19870317
Language, Pages: NL 8700632 (17)
Medical spark erosion catheter - ...
             blockages in blood vessels using ultrasonic transducer
... removes
 to aid accurate placement
International Patent Class (Additional): A61B-017/36
 13/3,K/46
               (Item 46 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
             **Image available**
007617417
WPI Acc No: 88-251349/198836
XRPX Acc No: N88-191177
 Instrument for removing blood clots from blood vessels - has wire
 loop fitted to end of capillary tube fitted inside flexible sheath
Patent Assignee: CRAMER B M (CRAM-I)
Inventor: CRAMER B M
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date Applicat No Kind Date Main IPC
                                                                    Week
DE 3804849 A 19880901 DE 3804849 A 19880217
                                                                    198836 B
```

Priority Applications (No Type Date): DE 87U2530 U 19870219 Language, Pages: DE 3804849 (5)

Instrument for removing blood clots from blood vessels - ...

...has wire loop fitted to end of capillary tube fitted inside flexible sheath

... Abstract (Basic): The surgical instrument for removing a blood clot from a blood vessel consists of an outer flexible tube (1) which is connected at its proximal end to a Y piece (7). This Y... International Patent Class (Additional): A61B-017/22

13/3,K/47 (Item 47 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c) 1999 Derwent Info Ltd. All rts. reserv.

007535750

WPI Acc No: 88-169682/198825 XRPX Acc No: N88-129780

Optical-fibre wire guided laser catheter for patient blood vessels - has fibres, core and sheath unattached to each other, permitting simultaneous bending without restriction, and optically transparent end cap

Patent Assignee: BARD INC C R (BRDC)
Inventor: DICKINSON D W; HERMAN S J; ROTH L A; SINOFSKY E L

Number of Countries: 010 Number of Patents: 011

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week GB 2198648 A 19880622 GB 8727556 A 19871125 198825 B GB 2198648 A 19880622 GB 8727556 A 19871125
FR 2606994 A 19880527
NL 8702597 A 19880616
AU 8780960 A 19880526
BR 8706333 A 19880719
DE 3739965 A 19880908 DE 3739965 A 19871125
US 4850351 A 19890725 US 86934629 A 19861125
ES 2005704 A 19890316 ES 873337 A 19871123
GB 2198648 B 19910731
IT 1223146 B 19900912 IT 8722674 A 19871118 A61B
CA 1303681 C 19920616 CA 551930 A 19871116 A61B-198828 198828 198829 198834 198837 198937 198940 199131 199220 A 19871116 A61B-017/36 199230

Priority Applications (No Type Date): US 86934629 A 19861125; US 85736804 A 19850522

Language, Pages: GB 2198648 (42); US 4850351 (12); CA 1303681 (F)

...A61B

... Abstract (Equivalent): A catheter , having optical fibres for delivering laser energy to a blood vessel to remove obstructions , is adapted to be guided controllably and selectively by a guide wire to the size to be treated. The catheter includes a central lumen which is open at the distal end of the catheter and which receives the guide wire so that the catheter may be advanced over the guide wire. A relatively few number of optical fibres is contained within, and extend longitudinally of, the catheter wall. The distal tip of the catheter is provided with a cylindrical optically transparent end cap. The distal ends of the fibres...

...at the distal emissions face of the end cap. USE/ADVANTAGE - Small dia. guidable laser catheter which is highly flexible and manoeuvrable... International Patent Class (Main): A61B-017/36 ...

...A61B-021/00

International Patent Class (Additional): A61B-017/32 ...

...A61M-025/01

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13/3,K/48
              (Item 48 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
007389119
WPI Acc No: 88-023054/198804
Related WPI Acc No: 89-129084; 89-241236; 89-372329; 90-031623; 90-075487;
  90-283780; 90-284203; 90-322336; 91-289385; 92-294198; 94-248287;
  95-301932; 95-375011; 97-401688
XRPX Acc No: N88-017479
Rotary catheter for removing obstruction from blood
                                                           vessel -
has flexible tube with tubular blade defining bore for passage of
obstruction material
Patent Assignee: SHIBER S (SHIB-I)
Inventor: SHIBER S
Number of Countries: 005 Number of Patents: 007
Patent Family:
Patent No Kind Date Applicat No Kind Date
                                                Main IPC
                                                              Week
EP 254414
           A 19880127 EP 87305277 A 19870615
                                                              198804 B
US 4732154 A 19880322 US 86874546 A 19860616
                                                              198815
US 5041082 A 19910820 US 8718083 A 19870224
                                                              199136
CA 1299953 C 19920505 CA 539735
                                    A 19870616
                                                              199223
EP 254414
          B1 19920812 EP 87305277 A 19870615
                                                              199233
DE 3781059 G 19920917 DE 3781059
                                    A 19870615
                                                              199239
                       EP 87305277 A 19870615
CA 1325151 C 19931214 CA 602612
                                    A 19890613
                                                              199405
Priority Applications (No Type Date): US 8718083 A 19870224; US 86874546 A
 19860616; US 8778042 A 19870727; US 88205479 A 19880613; US 88225880 A
 19880729; US 88243900 A 19880913; US 89350020 A 19890512
Filing Details:
Patent
         Kind Filing Notes
                               Application Patent
EP 254414
           Α
   Designated States (Regional): DE FR GB
EP 254414
           В1
   Designated States (Regional): DE FR GB
DE 3781059 G Based on
                                            EP 254414
Language, Pages: EP 254414 (E, 11); US 4732154 (5); EP 254414 (E, 11)
Rotary catheter for removing obstruction from blood
                                                         vessel -
...has flexible tube with tubular blade defining bore for passage of
obstruction material
...A61B-017/22
... Abstract (Equivalent): A rotary catheter insertable into a patient's
         vessel for cutting and removing an obstruction therein
   comprising a flexible tube (14) with front and rear ends insertable
    into the blood vessel; a blade (17) mounted to the front end (15)
   of the tube (14) the blade defining a through-hole forming with said
    flexible tube (14) a passage for passing obstruction material which
    is ingested into said tube (14); and means (20) connected to the rear
   end (16) of the tube (14) for rotating the flexible tube (14) and
    the blade (17); characterised by a flexible guide wire (12) insertable
    into the blood vessel; the flexible tube being slidable and
   rotatably disposed on said guide wire (12); said blade is tubular and
   cuts, in use, a narrow circular pass of the obstruction in the blood
  vessel to separate a centre core therefrom, and said passage is
```

...USE - A rotary catheter system insertable into a patient's artery for remotely cutting and removing an obstruction .
(

... Abstract (Equivalent): catheter to rotating. USE/ADVANTAGE - Insertable into a patient's artery for remotely cutting and removing an

continuous...

obstruction .

International Patent Class (Main): A61B-017/22
International Patent Class (Additional): A61B-017/32

13/3,K/49 (Item 49 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

007232538

WPI Acc No: 87-229546/198733 XRPX Acc No: N87-171836

Hydraulic device eliminating organic deposits obstructing human ducts - has nozzle diameter and liquid pressure giving high jet speeds

Patent Assignee: NERACHER A (NERA-I)

Inventor: NERACHER A

Number of Countries: 015 Number of Patents: 008

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week A 19870819 EP 86810616 A 19861231 EP 232678 198733 B A 19881130 CH 667996 198850 CH 670947 Α 19890731 198934 EP 232678 19910403 В 199114 CA 1281968 C
DE 3678557 G
ES 2022148 B 19910326 199117 19910508 199120 19911201 199202 US 5135482 A 19920804 US 86947619 A 19861230 A61B-017/22 199234

US 88165374 A 19880229 US 89363620 A 19890608

Priority Applications (No Type Date): CH 863466 A 19860830; CH 8655 A 19860113; CH 8555 A 19851231

Filing Details:

Patent Kind Filing Notes Application Patent

EP 232678 A

Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE EP 232678 B

Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE

US 5135482 A Cont of

Cont of US 86947619 Cont of US 88165374

Language, Pages: EP 232678 (F, 13); US 5135482 (12)

...A61B-017/22

...Abstract (Equivalent): The device uses a supersonic microjet liquid flow for canalizing the organic deposit obstruction to be removed. The device has a bendable tube insertable into a blood vessel in which an obstruction is to be removed. Within the tube extends a pressure resistant duct having an outlet or nozzle orifice developed in it by...

International Patent Class (Main): A61B-017/22

International Patent Class (Additional): A61M-025/00

13/3,K/50 (Item 50 from file: 351)

DIALOG(R) File 351: DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

004679801

WPI Acc No: 86-183143/198629 XRAM Acc No: C86-078947 XRPX Acc No: N86-136749

Surgical catheter to destroy blockage in coronary artery etc. - using laser beam with limited energy field to protect blood vessel wall

Patent Assignee: BARD INC C R (BRDC)

Inventor: HERMAN S J; ROTH L A; SINOFSKY E L; TURNQUIST C R; WONG J Y

Number of Countries: 010 Number of Patents: 015

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week BE 904358 A 19860630 BE 904538 A 19860306 198629 B

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GB 2171913 A 19860910 GB 865020
                                   A 19860228
                                                            198637
AU 8654290 A
              19860911
                                                            198644
NL 8600590 A 19861001 NL 86590
                                   A 19860306
                                                            198644
DE 3607437 A
                                   A 19860306
              19861030 DE 3607437
                                                            198645
FR 2587195 A
                                   A 19860306
              19870320 FR 863164
                                                            198717
ES 8800607 A
                                   A 19860305
              19880201 ES 552701
                                                            198811
US 4817601 A
              19890404 US 8747430 A 19870506
                                                            198916
GB 2219213 A
              19891206 GB 8612611 A 19860228
                                                            198949
GB 2171913 B
              19900328
                                                            199013
GB 2219213 B
              19900328
                                                            199013
CA 1266304 A
              19900227
                                                            199015
AU 9052391 A
              19900802
                                                            199038
IT 1188419 B
              19880114
                                                            199045
US 5167686 A
              19921201 US 85708826 A 19850306 C03B-037/025
                                                            199251
                       US 8747430 A
                                      19870506
                       US 89293692 A 19890105
```

Priority Applications (No Type Date): US 85708826 A 19850306; US 89293692 A 19890105

Filing Details:

Patent Kind Filing Notes Application Patent

US 5167686 A Cont of US 85708826 Div ex US 8747430

Div ex US 4817601

Language, Pages: BE 904358 (37); US 5167686 (14)

...Abstract (Basic): USE/ADVANTAGE - The catheter can be employed by a surgeon to remove a blockage in a coronary artery, or some other vacular obstruction. The biological material is destroyed in discrete layers and there is no danger of perfor-ating the wall of the blood vessel.

International Patent Class (Additional): A61B-017/32 ...

...A61M-025/00

13/3,K/51 (Item 51 from file: 351)
DIALOG(R)File 351:DERWENT WPI

(c)1999 Derwent Info Ltd. All rts. reserv.

004579595

WPI Acc No: 86-082939/198613

XRPX Acc No: N86-060624

Thrombus removing appts. from blood vessels - has catheter with suction and pressure duct, with latter opening in suction duct nozzle

Patent Assignee: VELTRUP E M (VELT-I)

Inventor: VELTRUP E

Number of Countries: 012 Number of Patents: 004

Patent Family:

 Patent No
 Kind
 Date
 Applicat No
 Kind
 Date
 Main
 IPC
 Week

 EP 175096
 A 19860326
 EP 85109361
 A 19850725
 198613
 B

 US 4690672
 A 19870901
 US 86921872
 A 19861021
 198737

 EP 175096
 B 19881207
 198849

 DE 3566612
 G 19890112
 198904

Priority Applications (No Type Date): DE 84U26270 U 19840906

Filing Details:

Patent Kind Filing Notes Application Patent

EP 175096 A

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE EP 175096 B

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE Language, Pages: EP 175096 (G, 12); EP 175096 (G)

Thrombus removing appts. from blood vessels - ...

...has catheter with suction and pressure duct, with latter opening in suction duct nozzle

```
International Patent Class (Additional): A61B-017/22 ...
...A61M-001/00 ...
...A61M-003/00
 13/3,K/52
                (Item 52 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
004234364
WPI Acc No: 85-061243/198510
XRPX Acc No: N85-045782
 Pulmonary artery thrombo-embolism treatment - using catheter holding
 electrodes to break-up thromboembolism use vacuum extractor
Patent Assignee: A MED SIBE ONCOLOGY (AMON-R)
Inventor: POTEKHIN Y U I; TYUTRAIN I I
Number of Countries: 001 Number of Patents: 001
Patent Family:
                        Applicat No Kind Date
Patent No Kind Date
                                                     Main IPC
                                                                    Week
SU 1107840 A 19840815 SU 3433592 A 19820505
                                                                     198510 B
Priority Applications (No Type Date): SU 3433592 A 19820505
Language, Pages: SU 1107840 (2)
... Abstract (Basic): The method involves opening up the peripheral venous
    vessel of the pulmonary artery , introducing a catheter into it,
    taking the catheter to the thromo-embolism while monitoring by
    contact radioscopy, and removing the thrombo -embolism by vacuum
    extraction...
...in the catheter between the two electrodes is performed with pulsing
    electric current until the thrombo -embolism is completely removed
    from the blood vessel . When blood appears in the cup of the vacuum aspirator, this indicates that extraction is completed...
International Patent Class (Additional): A61B-017/00
 13/3,K/53
                (Item 53 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
003698717
WPI Acc No: 83-58700K/198324
XRAM Acc No: C83-057059
XRPX Acc No: N83-105826
 Catheter partic. for diagnosis or obstruction removal - has inner and
 outer tubes and inner holding optical and laser fibres
Patent Assignee: UNIV CALIFORNIA (REGC
Inventor: GARRETT L
Number of Countries: 007 Number of Patents: 008
Patent Family:
                         Applicat No Kind Date
Patent No Kind Date
                                                     Main IPC
                                                                    Week
WO 8301893 A 19830609
EP 94964 A 19831130 EP 83900156 A 19830901
JP 58502037 W 19831201 JP 83500186 A 19811127
CA 1192804 A 19850903
IT 1154356 B 19870121
                                                                    198324 B
                                                                     198349
                                                                     198403
                                                                     198540
                                                                     198903
EP 94964
            В
                19890510
                                                                     198919
DE 3279676 G
                19890615
                                                                     198925
US 4875897 A 19891024 US 88180728 A 19880406
                                                                     199001
Priority Applications (No Type Date): US 81326221 A 19811201; US 85778278 A
```

Filing Details:
Patent Kind Filing Notes Application Patent
WO 8301893 A

19850918; US 86913639 A 19860930; US 8763699 A 19870612

Designated States (National): JP

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Designated States (Regional): DE FR GB
EP 94964
            Α
   Designated States (Regional): DE FR GB
EP 94964
            В
   Designated States (Regional): DE FR GB
Language, Pages: WO 8301893 (E, 39); EP 94964 (E); EP 94964 (E)
... Abstract (Basic): The inner tube may also contain a laser fibre for
    use in removing obstructions , and also flushing and suction
    channels. The catheter is capable of removing plaque, particularly
    when hard, and can operate in a very constricted area of an artery .
International Patent Class (Additional): A61B-001/06 ...
...A61M-001/00 ...
...A61M-023/00 ...
...A61M-025/00
 13/3,K/54
                (Item 54 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c)1999 Derwent Info Ltd. All rts. reserv.
001471881
WPI Acc No: 76-D4786X/197615
 Urethral catheter and body drainage device - leakage preventing means
 also retain wings in expanded position
Patent Assignee: ADAIR E L (ADAI-I)
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date
                         Applicat No Kind Date Main IPC
                                                                  Week
US 3946741 A 19760330
                                                                  197615 B
Priority Applications (No Type Date): US 74530840 A 19741209
... Abstract (Basic): chamber which is sealed at its other end by a flange
    secured to the inner tube . In another form, the outer tube is
    squeezed onto and in sealing engagement with the inner tube . In still
    another form a resilient bellows is provided, one end of which is
    secured to the outer tube and the other to the inner tube , forming
    a chamber which may trap any leakage between the tubes . One form of
    means for securing distal ends of the tubes together permits the
    wings to be disposed closer to the distal ends, reducing the projection
    of the ends into a body cavity or the like. Another form of outer tube
     provides helical wings which are adapted to remove
                                                           clots from
          vessels rather than to form locking means for retaining the
   blood
   tubes in a fixed position.
International Patent Class (Additional): A61B-017/34
 13/3,K/55
                (Item 55 from file: 351)
DIALOG(R) File 351: DERWENT WPI
(c) 1999 Derwent Info Ltd. All rts. reserv.
001329747
WPI Acc No: 75-M3675W/197546
 Three-way phlebotomy needle connector - has tubes for blood withdrawal,
 anticoagulant addition and needle saline rinse
Patent Assignee: HAEMONETICS CORP (HAEM-N)
Number of Countries: 006 Number of Patents: 006
Patent Family:
Patent No Kind Date
                         Applicat No Kind Date
                                                   Main IPC
                                                                  Week
DE 2517311 A 19751106
US 3916892 A 19751104
FR 2268537 A 19751226
GB 1490165 A 19771026
CA 1056682 A 19790619
IT 1032772 B 19790620
                                                                  197546 B
                                                                  197547
                                                                  197607
                                                                  197743
                                                                  197927
                                                                  197940
```

Priority Applications (No Type Date): US 74464835 A 19740429

...Abstract (Basic): from a vein, cleaned by removing incipient clots in a centrifuge, and returned to the **vein**. Blood from a **vein** passes through the narrow **tube** of a phlebotomy needle held by a push fit at the lower end of the connector so as to extend within, but not touching, a wider **tube** held at the upper end of the connector and conveying the blood to the centrifuge. The resulting annular space between the two **tubes** is connected, through a small antechamber to two side **tubes**. An anticoagulant liquid passes down one **tube** to the antechamber to mix with the blood withdrawn from the patient. This takes place...

International Patent Class (Additional): A61M-001/03 ...

...A61M-005/00

13/3,K/56 (Item 56 from file: 351)

DIALOG(R) File 351: DERWENT WPI

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000743245

WPI Acc No: 70-80585R/197043

Miroliter hyodermic/transfer syringe with - disposable parts

Patent Assignee: DRUMMOND INDS CO (DRU -N)

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Main IPC Week
US 3537453 A 197043 B
GB 1232087 A 197119

Priority Applications (No Type Date): US 68713084 A 19680314

...Abstract (Basic): The syringe comprises a transparent, graduated barrel, removable closure members for both ends of the barrel with longitudinal bores, a concentric, capillary tube in the barrel fitting into the bores of the closure bores. A plunger is inserted into the capillary, its dia. being identical with the capillary inner dia...

International Patent Class (Additional): A61M-005/22

13/3,K/57 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

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05083111 **Image available**

CATHETER FOR REMOVING PORRIDGE-LIKE THROMBUS

PUB. NO.: 08-038611 [JP 8038611 A] PUBLISHED: February 13, 1996 (19960213)

INVENTOR(s): SOEJIMA HIDEHISA

APPLICANT(s): NISSHO CORP [470126] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 06-197371 [JP 94197371] FILED: July 29, 1994 (19940729)

INTL CLASS: A61M-025/00; A61B-017/00

ABSTRACT

...CONSTITUTION: The front end 4 of the catheter is introduced into the blood vessel from the downstream side in the blood vessel in the state of shrinking the first and second balloons 2, 3 and the second...

... thrombus. Pressurized fluid is then introduced from a first inflow port 10 of the first **catheter** 7 communicated with the first balloon 2 extending from the rear end of the **catheter** to expand the first balloon 2

and to shut off the blood. The pressurized fluid is thereafter introduced from a second pressurized fluid introducing pipe 6 communicated with the second balloon 3 into the second balloon 3 to expand this balloon and to move the second catheter 8 backward, by which the second balloon 3 is slid on the inside wall of the blood vessel and the porridge-like thrombus is removed .

13/3,K/58 (Item 2 from file: 347)

DIALOG(R) File 347: JAPIO

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Image available 04944094

FOREIGN MATTER REMOVING BALLOON CATHETER

PUB. NO.:

07-236694 [JP 7236694 A]

PUBLISHED:

September 12, 1995 (19950912)

INVENTOR(s):

NAKAMURA HISAO

YAMAMOTO MASAKO KAWABATA TAKASHI

APPLICANT(s): NIPPON ZEON CO LTD [352314] (A Japanese Company or

Corporation), JP (Japan)

APPL. NO.:

06-052549 [JP 9452549]

FILED:

February 28, 1994 (19940228)

INTL CLASS:

A61M-025/00 ; A61B-017/00

ABSTRACT

...CONSTITUTION: In a balloon catheter 1, a tube 2 has one or two inner cavities to that a guide wire can be passed...

...part, so that the balloon 3 is easy to advance without being caught in a blood vessel when expanded and contracted. Further, the balloon 3 has a cap-like recessed opening part...

... 4 when the balloon 3 is expanded. Thus, when a thrombus, atheroma, or calculus is removed , the thrombus or the like can be extremely easily captured, and is never dropped off in the...

13/3,K/59 (Item 3 from file: 347)

DIALOG(R) File 347: JAPIO

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Image available 04065284 OBSTRUCTION REMOVING CATHETER

PUB. NO.:

05-056984 [JP 5056984 A]

PUBLISHED:

March 09, 1993 (19930309)

INVENTOR(s):

KUWABARA MAKIKO UTSUNOMIYA YUKO

HORIE MASAO

APPLICANT(s): NISSHO CORP [470126] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.:

03-244561 [JP 91244561] August 29, 1991 (19910829)

FILED:

JOURNAL:

Section: C, Section No. 1081, Vol. 17, No. 364, Pg. 124, July

09, 1993 (19930709)

INTL CLASS:

A61B-017/22 ; A61B-017/36 ; A61M-025/00

ABSTRACT

...CONSTITUTION: A tube 2 is inserted into the blood vessel and an aperture 14 is installed in the obstruction in the blood vessel . A wire 4 is then extended by a wire operating jig 6 to shift the aperture 14 surface toward the inside wall side of the blood vessel . A rotating member 3 is then rotated to rotate an excision member 1 and to excise the obstructions in the apertures 14. The obstructions are removed by the

blade surfaces 8 of the curved and hollowed projections 20 of the excision \dots

... pieces are partly gathered into the obstruction collecting chamber from the inside cavity of the **tube** 2. These obstruction pieces are discharged from a discharge port 5 connected to a vacuum...

13/3,K/60 (Item 4 from file: 347)

DIALOG(R) File 347: JAPIO

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04039417 **Image available**

EMBOLECTOMY CATHETER

PUB. NO.: 05-031117 [JP 5031117 A] PUBLISHED: February 09, 1993 (19930209)

INVENTOR(s): NOBEYOSHI MASAKIYO

APPLICANT(s): NISSHO CORP [470126] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 03-210297 [JP 91210297] FILED: July 26, 1991 (19910726)

JOURNAL: Section: C, Section No. 1072, Vol. 17, No. 321, Pg. 8, June

18, 1993 (19930618)

INTL CLASS: A61B-017/22; A61B-017/00; A61M-025/00

ABSTRACT

... axial direction of the internal member 1 to communicate with the connecting tube 11. To excise an embolism in a blood vessel, a guiding catheter having a main catheter inserted thereinto is put into the blood vessel and a motor is driven advancing the catheter. The rotation of the motor is transmitted to the excision head 31 via the rotary drive shaft 13, the discharge tube 12 and the connecting tube 11 to excise the embolism on the internal wall of the blood vessel. An embolism piece is sucked away at a suction port 23 connected to a vacuum source via the excision head 31, an internal hole of the connecting tube 11 and a side hole of the discharge tube 12.

13/3,K/61 (Item 5 from file: 347)

DIALOG(R) File 347: JAPIO

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03856446 **Image available**

LASER PROBE

PUB. NO.: 04-221546 [JP 4221546 A] PUBLISHED: August 12, 1992 (19920812)

INVENTOR(s): MASUBUCHI RYOJI

YOSHIMOTO YOUSUKE HATORI TSURUO MATSUNO KIYOTAKA HASEGAWA AKIRA YOSHIHARA MASAYA KURAMOTO SEIJI NAKAMURA TAKEAKI HAGINO TADAO

APPLICANT(s): OLYMPUS OPTICAL CO LTD [000037] (A Japanese Company or

Corporation), JP (Japan) 02-406036 [JP 90406036]

APPL. NO.: 02-406036 [JP 90406036] FILED: December 25, 1990 (19901225)

JOURNAL: Section: C, Section No. 1009, Vol. 16, No. 566, Pg. 123,

December 08, 1992 (19921208)

INTL CLASS: A61B-017/36 ; A61B-017/00 ; A61N-005/06

ABSTRACT

...CONSTITUTION: When a thrombus part is removed from a blood vessel

with a use of laser probe, a **catheter tube** 1 is inserted into the vessel, and a laser guide 5 is inserted into the **tube** 1 so as to position the front end thereof at the front end opening of the **tube** 1. Then laser L is irradiated so as to **remove** the **thrombus** part. Next, the laser guide 5 is moved toward the front end part of the **tube** 1, and when a center hole in a front end member 3 is blocked by...

...provided in the front end part of the laser guide 5, liquid fed into the tube 1 is pooled so as to inflate the balloon 4 provided around the outer periphery of the end part of the tube 4, by a fluid pressure. Accordingly, the thrombus part may be enlarged, and accordingly, the removal of the thrombus part and the enlargement thereof can be made by only one catheter.

13/3,K/62 (Item 6 from file: 347)

DIALOG(R) File 347: JAPIO

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03856444 **Image available**
LASER PROBE

PUB. NO.: 04-221544 [JP 4221544 A] PUBLISHED: August 12, 1992 (19920812)

INVENTOR(s): MASUBUCHI RYOJI
YOSHIMOTO YOUSUKE
HATORI TSURUO
MATSUNO KIYOTAKA
HASEGAWA AKIRA
YOSHIHARA MASAYA

KURAMOTO SEIJI NAKAMURA TAKEAKI

HAGINO TADAO

APPLICANT(s): OLYMPUS OPTICAL CO LTD [000037] (A Japanese Company or

Corporation), JP (Japan)

APPL. NO.: 02-406001 [JP 90406001] FILED: December 25, 1990 (19901225)

JOURNAL: Section: C, Section No. 1009, Vol. 16, No. 566, Pq. 123,

December 08, 1992 (19921208)

INTL CLASS: **A61B-017/36**

ABSTRACT

...CONSTITUTION: The insertion part 1 of a laser probe is inserted in a **blood vessel** through a **catheter**, and a rod member 6 is inserted through the front end part of the insertion...

...retracting the thrombus part of the rod member 6 after the thrombus part 10 is **removed**, the **thrombus** pieces 11 trapped by the brin 8 may removed from the **blood vessel** 9.

13/3,K/63 (Item 7 from file: 347)

DIALOG(R) File 347: JAPIO

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03749541 **Image available**
THROMBUS REMOVER

PUB. NO.: 04-114641 [JP 4114641 A] PUBLISHED: April 15, 1992 (19920415)

INVENTOR(s): SEKIYA SHINJI

APPLICANT(s): DISCO ABRASIVE SYST LTD [402375] (A Japanese Company or

Corporation), JP (Japan)

APPL. NO.: 02-235409 [JP 90235409]

FILED: September 04, 1990 (19900904)

JOURNAL: Section: C, Section No. 971, Vol. 16, No. 362, Pg. 5, August

05, 1992 (19920805)

INTL CLASS: A61B-017/32 ; A61B-017/00 ; A61B-017/22

ABSTRACT

...CONSTITUTION: A thrombus remover 1 comprises a blood vessel inserting section 2 and a non-blood vessel inserting section 3. The blood vessel inserting section 2 comprises a flexible tube 4 and a wire 5 inserted with a moderate freedom and a thrombus remover, namely, a drill 6 is provided at the tip thereof. The drill 6 is made...
... and the increase in diameter is controlled by an open end 10 of the flexible tube 4. Thus, with a relative movement of the wire 5 and the flexible tube 4, the working element 7 and the open end 10 move relatively thereby varying an...

13/3,K/64 (Item 8 from file: 347)

DIALOG(R) File 347: JAPIO

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03483171 **Image available**

CHEMICAL FEEDER TO BE EMBEDDED IN BODY

PUB. NO.: 03-146071 [JP 3146071 A] PUBLISHED: June 21, 1991 (19910621)

INVENTOR(s): UMEYAMA KOICHI

APPLICANT(s): OLYMPUS OPTICAL CO LTD [000037] (A Japanese Company or

Corporation), JP (Japan)

APPL. NO.: 01-285694 [JP 89285694] FILED: November 01, 1989 (19891101)

JOURNAL: Section: C, Section No. 867, Vol. 15, No. 361, Pg. 157,

September 12, 1991 (19910912)

INTL CLASS: A61M-037/00

ABSTRACT

PURPOSE: To early **remove** a blood **clot** by providing a means, which detects the blood clot, to be formed in the tip opening part of a **catheter** to be inserted into a **blood vessel** and notifying it to an external part by a warning means that the blood clot...

13/3,K/65 (Item 9 from file: 347)

DIALOG(R) File 347: JAPIO

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03384347 **Image available**
WATER JET OPERATING APPARATUS

PUB. NO.: 03-047247 [JP 3047247 A] PUBLISHED: February 28, 1991 (19910228)

INVENTOR(s): NISHISAKA TAKESHI

APPLICANT(s): NISHISAKA TAKESHI [000000] (An Individual), JP (Japan)

APPL. NO.: 01-128030 [JP 89128030] FILED: May 22, 1989 (19890522)

JOURNAL: Section: C, Section No. 831, Vol. 15, No. 189, Pg. 75, May

15, 1991 (19910515)

INTL CLASS: A61B-017/32 ; A61B-017/32

ABSTRACT

...CONSTITUTION: A water jet operating apparatus 1 consists of a pump tube 4 connected with a pressure tube 3, a tube 5 connected with the pump tube 4, an air trap 6 connected with the tube 5 and a bottle needle 7 connected with the air trap 6 and these are monolithically constituted. It is possible thereby to perform cutting, incision, resection of internal organs, removal of an occlusion in a blood vessel, etc., by means of a simple method and when cutting system is nt desirable, it...

13/3,K/66 (Item 10 from file: 347)

DIALOG(R) File 347: JAPIO

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03156271 **Image available**

BYPASS TUBE

PUB. NO.: 02-131771 [JP 2131771 A] PUBLISHED: May 21, 1990 (19900521)

INVENTOR(s): NOGAWA ATSUHIKO

APPLICANT(s): TERUMO CORP [365358] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 63-285286 [JP 88285286] FILED: November 11, 1988 (19881111)

JOURNAL: Section: C, Section No. 746, Vol. 14, No. 363, Pg. 23, August

07, 1990 (19900807)

INTL CLASS: A61M-001/36

ABSTRACT

...CONSTITUTION: The blood which is filtered and defoamed by an air bubble remover 21 is partly transferred through the throttling part 4 of the bypass tube 1 to a 2nd blood storage vessel 13. The flow rate of the blood is regulated by the throttling part 4 at ordinary times without allowing a large volume of the blood to flow to the 2nd blood storage vessel 13 side even it the bore of the tube body 2 is large. Since the bore of the tube body 2 is much larger than the bore of the fine hole 5 of the...

... smoothly and rapidly. As a result, the time before the air flowing into the bypass tube 1 arrives at the inside of the 2nd blood storage vessel 13 is drastically shortened and the air in the blood is sufficiently removed.

13/3,K/67 (Item 11 from file: 347)

DIALOG(R) File 347: JAPIO

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02688957 **Image available**
LASER PROBE FOR TREATING THROMBUS

PUB. NO.: 63-305857 [JP 63305857 A] PUBLISHED: December 13, 1988 (19881213)

INVENTOR(s): IMAGAWA HIBIKI

APPLICANT(s): OLYMPUS OPTICAL CO LTD [000037] (A Japanese Company or

Corporation), JP (Japan)

APPL. NO.: 62-139942 [JP 87139942] FILED: June 05, 1987 (19870605)

JOURNAL: Section: C, Section No. 583, Vol. 13, No. 145, Pg. 96, April

10, 1989 (19890410)

INTL CLASS: A61B-017/36

ABSTRACT

... a thrombus (k) and the heated part of said thrombus is destructed to dilate a **blood vessel** (b). The leading end part 14 of the leading end tip 11 is advanced to the front of the thrombus (k) to position the trombus (k) remaining in the **blood vessel** (b) to the space part 15 between the base part 12 and leading end part 14 of said tip. When a guide **tube** 18 is slid in the advance direction, the blade 17 provided to the leading end...

... case that the thrombus (k) is irradiated with laser beam at be removed and the blood vessel (b) can be sufficiently dilated as compared with a case removing the thrombus only by the leading end chip 11.